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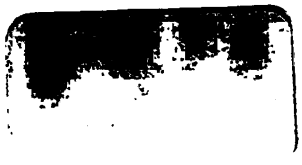

London, Eng.

PUBLISHED BY THE SOCIETY OF TELEGRAPH ENGINEERS.

610-44

CATALOGUE

OF BOOKS AND PAPERS RELATING TO

ELECTRICITY, MAGNETISM,

THE ELECTRIC TELEGRAPH, &c.

INCLUDING

THE RONALDS LIBRARY.

1

COMPILED BY

SIR FRANCIS RONALDS, F.R.S.

WITH A BIOGRAPHICAL MEMOIR.

EDITED BY

ALFRED J. FROST,

Acting-Librarian of the Society of Telegraph Engineers and Member of the Library Association of the United Kingdom.

LONDON: E. & F. N. SPON, 46, CHARING CROSS.

NEW YORK: 446, BROOME STREET.

1880.

~~H.897~~

~~Phys 3000.2~~ 1880, Sept. 18.
Minot fund.

Phys 3000.2 (1)

HARVARD UNIVERSITY
LIBRARY
JUN 25 1985

UNWIN BROTHERS, PRINTERS, 109A, CANNON STREET, LONDON, AND CHILWORTH, SURREY.

PREFACE.

THE compilation of this Catalogue was commenced at an early date, and was continued up to the death of its compiler in 1873.

It contains over 13,000 entries, comprising not only the books, pamphlets, and other publications in the RONALDS LIBRARY, but also the titles of all other works on the subject of Electricity, Magnetism, &c. which came to the notice of its compiler.

The titles are arranged under the authors' names, and the anonymous entries have been placed, with a slight attempt at classification, under a separate heading at the end of letter A.

After Sir Francis Ronalds retired from the direction of Kew Observatory, he lived for many years abroad, chiefly in Italy, his principal occupation being the compilation of this Catalogue and the formation of his Library. He, consequently, had exceptional opportunities for obtaining the foreign works upon the subject, and the collection is extremely rich in such publications.

During this time it was one of his favourite pursuits to obtain as many of the Electrical works as possible which he required, which had belonged to those whose names have become eminent, and are identified with the subject. An instance of this may be given of the celebrated Volta's works, a large number of which he obtained from the Count Zanino Volta at great personal trouble and some expense. There are also in the Library many works which originally belonged to Arago, Faraday, Roget, and others.

Many of the most important works relating to Electricity, and, indeed, of most other branches of science, consist of papers contributed to the Transactions and Proceedings of scientific bodies, and

to scientific periodicals. These papers have each been treated as separate works, and their titles are recorded under the author's name, a note being added giving the reference to the transactions or periodicals where they may be found.

A considerable number of the titles have been obtained from booksellers' catalogues, and from notes and references in Electrical writings, and, where Sir Francis Ronalds has been unable to obtain the works, the source from which the title was obtained is in most cases given.

The date and place of birth, and, where possible, of the death of each author, have been added, the greater portion of these having been obtained from Poggendorff's "Handwörterbuch zur Geschichte der Exacten Wissenschaften," 2 vols. Roy. 8vo. Leipzig, 1863. This work was also carefully examined, and those parts extracted which relate to Electricity.

As the binding of the books in the Library has only just been completed, it was impossible, owing to the want of arrangement of the works, and to the large number of unbound pamphlets and papers, to refer to them to any extent for the correction of titles; besides which, there are between 3,000 and 4,000 titles of works entered in the Catalogue which are not in the Library.

The Catalogue is published without the addition of any new entries, such being the express desire of the donor of the Library, Mr. Samuel Carter. Great efforts were made to obtain his permission to make additions, and, as far as possible, to complete the Catalogue to the date of publication, but it is to be regretted that these efforts were unsuccessful. The Society has, however, at its disposal a large amount of material available for this purpose, and it is contemplated at a not very distant date to publish a Supplement, which will make the Catalogue more complete, at any rate as regards the more recent publications.

Great care has been taken to issue the Catalogue as free from error as possible, and it is hoped that it will be found as accurate as the nature of the work will permit.

There can be no doubt that it was the original intention of Sir Francis Ronalds to present his Library to the Royal Society (of which he was a Fellow), but previous to his death it was represented to him that it would add but little to the value of the Royal Society's collection, as they already possessed the greater number of the books. It was further represented that as his name was so much identified with the subject of Electrical Telegraphy, he would be conferring great benefit upon those specially interested in Electricity and the Electric Telegraph, by making the Library more available for their use than it could be in the Library of the Royal Society, in which place it would be, to a great extent, out of the reach of practical electricians and telegraph engineers. These arguments did not fully prevail with him, as the Society had only recently been founded, and could at that time scarcely be said to have been firmly established.

Sir Francis Ronalds became one of the earliest members of the Society, but, owing to his advanced age, he was unable to be present at any of its meetings. He died about two years after its foundation, but he had during this time some opportunity of seeing its rapid development, and no doubt this, coupled with the representations that had been made to him, considerably influenced him in the disposal of the Library. He died on the 8th August, 1873, finally bequeathing the Library to his brother-in-law, the late Mr. Samuel Carter, with a desire "that it should not be dispersed, but should be preserved in an entire state, and so as to be of as much use as possible to such persons as from time to time should be engaged in the pursuit of Electrical science and other cognate sciences."

Mr. Carter considered that he would be best carrying out the wishes of Sir Francis Ronalds by handing the Library over to the Society, which he did upon Trust, the following being the names of the Trustees: Samuel Carter, Esq., Dr. Edmund Ronalds, John Corrie Carter, Esq., John Martineau Fletcher, Esq., Sir William Thomson, F.R.S., D.C.L., Latimer Clark, Esq., M.I.C.E., Charles William Siemens, Esq., F.R.S., D.C.L., and Major (now Lieut.-Colonel) Frank Bolton.

There are several conditions upon which the Society retains the Library, the two principal being the publication of this Catalogue and the binding of the Library—the latter condition having just been carried out.

As it was the desire of Sir Francis Ronalds that the Library should be made as widely useful as possible, it is the intention of the Council of the Society, as soon as the arrangement of the books is completed, to open the Library to the Members of the Society, and under certain necessary restrictions to the public generally.

The thanks of the Society are due to the Commandeur E. D'Amico, Director-General of Italian Telegraphs, M. Alfred Niaudet, of Paris, and Mr. R. Von Fischer-Treuenfeld, for their kindness in having undertaken the correction of the Italian, French, and German portions of the proofs respectively.

BIOGRAPHICAL MEMOIR

OF

SIR FRANCIS RONALDS, F.R.S.

BY

ALFRED J. FROST.

FRANCIS RONALDS was born in London, on the 21st February, 1788, and was the son of Francis Ronalds, Esq., a merchant of the same city. He was educated at a private school, at Cheshunt, his master being the Rev. E. Cogan.

The Ronalds family, who originally came from Scotland, appear to have settled at Brentford for some considerable time, for on reference to Faulkner's "Antiquities of Brentford and Chiswick," it will be found that there are no less than ten memorials in St. Lawrence Church, Brentford, erected between 1779 and 1833, to the memory of members of the family.

He early showed a taste for original experiment, and this, coupled with considerable mechanical and inventive ability, enabled him to construct with his own hands electrical and scientific apparatus of various kinds. He was also an excellent draughtsman, and evidence of this talent may be seen in most of his publications, the drawings of which are, in almost every case, his own.

At an early age he studied Electricity, and having (in 1814) made the acquaintance of M. De Luc—then engaged in a series of

interesting electrical experiments—he was induced to turn his attention to the practical development of the science.

During 1814-15 he wrote several electrical papers, which were published in the *Philosophical Magazine*; and a complete list of these and of his other writings will be found at pp. 488 and 489 of the Ronalds Catalogue.

The name of Ronalds will, however, continue to be best remembered from the fact that as early as 1816 he demonstrated by actual experiment the possibility of an electric telegraph, and showed that electricity could be practically used for conveying messages over long distances.

Being fully cognisant of the difficulties arising from defective insulation, and knowing that those who had previously experimented in the same direction had failed from this cause, he secured the success of his arrangements by adopting for his underground line a system of insulation vastly superior to any that had hitherto been employed.

Although the telegraph of Ronalds has been frequently described, and is now tolerably well known to telegraph engineers, a biographical notice of its inventor would be incomplete which did not include a short description of it, as well as an account of the reasons of its non-adoption, or at least of its not having been tried on a larger scale than the experimental line which he constructed would permit of.

The telegraph referred to was erected and worked in 1816, at Hammersmith, and is described and fully illustrated in a small and exceedingly interesting work which was published in 1823,* and now scarce: a second edition was published in 1871. The following is an extract from this work: "Upon a lawn or grassplot at Hammer-

* Description of an Electrical Telegraph, and of some other Electrical Apparatus. By Francis Ronalds. Demy 8vo., London, 1823.

smith* I erected two strong frames of wood at a distance of twenty yards from each other, and each containing nineteen horizontal bars; to each bar was attached thirty-seven hooks, and to the hooks were applied as many silken cords, which supported a small iron wire (by these means well insulated), which (making its inflections at the points of support) composed in one continuous length a distance of rather more than eight miles."

Having made many experiments with this over-head line, which was the longest that had at that time been constructed, he gave his attention to the most suitable line to be adopted for the telegraph which he proposed. This he decided by proposing an underground line, a length of which he constructed and laid down, and which he describes as follows: "A trench was dug in the garden five hundred and twenty-five feet in length, and four feet deep; in this was laid a trough of wood two inches square, well lined on the inside and out with pitch, and within this trough thick glass tubes were placed, through which the wire ran." †

In order to prevent the tubes from breaking by the variation of temperature, each length was laid a short distance from the next length, and the joint made with soft wax. "The trough was then covered with pieces of wood, screwed upon it whilst the pitch was hot; they also were well covered with pitch, and the earth then thrown into the trench again."

The method of conveying intelligence which he adopted may be briefly described as follows:—At each end of the line was placed a clock beating dead seconds, having upon its seconds arbor a light

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* The house at Hammersmith where the line was erected, and where the original experiments took place, is the first large house at the east end of the Upper Mall.

† The first underground line laid by Cooke, between Euston and Camden, in 1837, consisted of solid blocks of wood, in which were cut small grooves for receiving the wires, and which were afterwards filled up by wooden strips.

circular brass plate divided into twenty equal parts. Each division was marked with the letters of the alphabet—leaving out the letters J Q U W X and Z;—there were also a series of figures from 1 to 10, and 10 preparatory signs. Before or over this disc was fixed another brass plate, which had an aperture of such dimensions that whilst the disc was carried round by motion of the clock only one of the letters, figures, or preparatory signs upon it could be seen through the aperture at the same time. In front of the clocks a Canton's Electrometer of pith balls was suspended by an insulated wire communicating with a cylindrical electrical machine of six inches' diameter, which was connected with the line. These clocks were adjusted (by a method described) to go synchronously.

Upon a current being sent from the electrical machine through the line the pith balls diverged, and by noting the letter which appeared through the aperture at the moment, a message could be spelt out—or, as Ronalds says, "by the use of a telegraphic dictionary" (or code, as it would now be called) "a word, or even a whole sentence, could be conveyed by only two or three discharges."

The code, or "dictionary," proposed by Ronalds is described in the work, and is accompanied by a plate which represents one leaf of it.

Having made a large number of experiments with these lines, and having thoroughly proved the practicability of his invention, he decided upon bringing it to the notice of the Government. This he did on the 11th of July, 1816, in a letter addressed to Lord Melville, the First Lord of the Admiralty, as follows:—

"Mr. Ronalds presents his respectful compliments to Lord Melville, and takes the liberty of soliciting his lordship's attention to a mode of conveying telegraphic intelligence with great rapidity, accuracy, and certainty, in all states of the atmosphere, either at night or in the day, and at small expense, which has occurred to him whilst pursuing some electrical experiments. Having been at some pains to ascertain the *practicability* of the scheme, it appears to Mr.

Ronalds, and to a few gentlemen by whom it has been examined, to possess several important advantages over any species of telegraph hitherto invented, and he would be much gratified by an opportunity of demonstrating those advantages to Lord Melville by an experiment which he has no doubt would be deemed decisive, if it should be perfectly agreeable and consistent with his lordship's engagements to honour Mr. Ronalds with a call; or he would be very happy to explain more particularly the nature of the contrivance if Lord Melville could conveniently oblige him by appointing an interview.

Upper Mall, Hammersmith, July 11, 1816."

Shortly afterwards Mr. Ronalds received the following in reply:—

"*Admiralty, July 29th*, 1816.

Sir,—I am desired by Lord Melville to acknowledge the receipt of your letter of the 11th instant. His Lordship has left town for some weeks, but he has requested me to see you on the subject of your discovery if you desire it.

I am, Sir,

Your most obedient, humble servant,

— Ronalds, Esq. R. N. Hay."

Mr. Ronalds replied that he did desire an interview, but before the nature of the invention had been made known except to Lord Henniker, Dr. Rees, Mr. Brande, and a few personal friends, he received the following laconic and curious communication from Mr. Barrow (afterwards Sir John Barrow), the Secretary of the Admiralty:—

"Mr. Barrow presents his compliments to Mr. Ronalds, and acquaints him with reference to his note of the 3rd instant, that telegraphs of any kind are now wholly unnecessary; and that no other than the one now in use will be adopted.

Admiralty Office, 5th August, 1816."

Sir John Barrow was the author of the article "Telegraph," in the seventh edition of the Encyclopædia Britannica.

Ronalds was too far ahead of his time, and too purely a man of science to secure a hearing for his invention in these early days, and it was left to others to mature his ideas, and to establish the system which his prophetic eye had foreseen would one day transform the world.

In alluding to the above correspondence in a foot-note at page 24 of his work, Ronalds says: "I felt very little disappointment and not a shadow of resentment on the occasion, because everyone knows that telegraphs have long been great bores at the Admiralty. Should they *again* become *necessary*, however, perhaps electricity and electricians may be indulged by his Lordship and Mr. Barrow with an opportunity of *proving* what they are capable of in this way. I claim no indulgence for mere chimeras and chimera framers, and I hope to escape the fate of being ranked in that unenviable class."

It is probable, however, that he did feel some disappointment, for in the preface to his work he speaks of "taking leave of a science which once afforded him a favourite source of amusement," and adds that "he is compelled to bid a cordial adieu to electricity."

The only telegraph which had at that time been erected, and which is referred to in Mr. Barrow's communication, was the semaphore telegraph from Portsmouth to London. This telegraph was used for many years after the date now in question, and was the subject of a parliamentary return in 1848 (twenty-seven years afterwards), hereafter referred to. It was based upon the invention of Chappe, which had been previously used in France, and which was afterwards modified by Colonel Pasley and Sir Home Popham. It was worked by moveable arms, by means of which signals could be transmitted from station to station; but it could only be used in the daytime, and then only during fine weather. In foggy or misty weather it was more or less difficult and often impossible for one station to see the next, and signals could not be communicated; and it sometimes occurred that a message would be commenced in London or Portsmouth when the

atmosphere was clear, and its transmission had to be delayed in consequence of some part of the route being enveloped in fog or mist.

In the parliamentary return referred to, bearing date the 2nd May, 1848, it is stated that during three years it was found impossible to use the semaphore from the Admiralty on no less than 328 days: the usual hours of working being from October 1st to February 28th, five hours per day; and from March 1st to September 30th, seven hours per day.

Judged by the light of our present requirements, it is almost impossible to realise the fact that the Government was contented with the means of conveying intelligence between their head-quarters and their principal naval station, then at their disposal, and which found any other telegraph "*wholly unnecessary*."

The semaphore telegraph between London and Portsmouth is stated to have cost £2,000 per annum.

In the work before referred to, Ronalds foretells in a very striking manner the many public uses to which the telegraph was applicable. "Why," he says, "should not our Kings hold councils at Brighton with their Ministers in London? Why should not our Government govern at Portsmouth almost as promptly as in Downing Street? Why should our defaulters escape by default of our foggy climate? Let us have *electrical conversazione* offices communicating with each other all over the kingdom."

The phenomena of the "retardation of current," which so much occupied the attention of electricians and telegraph engineers during the early days of submarine telegraphy, was distinctly foreseen and described in this work.

At pp. 16—20 he provides for repairing the line and discovering faults; and in referring to the line being wilfully damaged, he says: "Should they still succeed in breaking the communication, hang them if you can catch them, damn them if you cannot, and mend it immediately in both cases."

The allusion to the escape of criminals is curious, seeing that a quarter of a century afterwards, one of the first practical uses of the telegraph of Cooke and Wheatstone (and which did more to popularise the telegraph than anything else) was its employment in effecting the capture of the Quaker Tawell, for the murder at Salthill.

The telegraph of Ronalds was worked by frictional electricity, and although in its crude form it might not have been at once capable of doing all that he promised, yet, had the Admiralty given the invention a fair trial in 1816, it might have been easily improved, and the whole history of the telegraph would in all probability have been changed; at any rate its powers would have been exercised, and the world might have profited by its advantages long before 1837.

During the time which elapsed between the erection of the experimental line in 1816 and the publication of the description of it in 1823, Ronalds, who was a philosopher as well as an inventor, went abroad, travelling through Europe to the East; this journey occupied between two and three years, and it is interesting to note that during this period he had (it would seem, from some of his letters written at the time) commenced the collecting of a portion of the electrical works which now form the fine library in the possession of the Society of Telegraph Engineers.

Besides the description of the telegraph there is included in the before-mentioned work "a description of an improved electrical machine; description of a new mode of electrical insulation, and of some experiments on Vesuvius; a new electrograph for registering the change of atmospheric electricity; a pendulum doubler; and an attempt to apply M. de Luc's electric column to the measurement of time."

Ronalds employed a local carpenter, named Eyles, to assist him in the erection of the telegraph and in laying the underground line. Eyles died in 1854, but his son, Silas Eyles, who was a young lad at the time, and who is now living at Barnes, distinctly remembers the

line which his father assisted to erect. He gave the writer several interesting particulars with reference to some experiments which Ronalds performed before him. One of these experiments was to notice the time which elapsed between the connection of the electric machine with the line and the firing of the cannon at the other end—this he said he was unable to do, the cannon going off at the same moment the connection was made. He remembers Ronalds saying that if the line had been 500 miles long instead of eight the result would have been nearly the same.

The name of Ronalds had been long known to the few interested in the history of the electric telegraph, but public attention was more particularly drawn to his claims during the controversy between Cooke and Wheatstone as to the invention of their electric telegraph, a subject upon which Mr. Latimer Clark has thrown considerable light in his exhaustive Memoir of Sir William Fothergill Cooke.*

Prof. Wheatstone, in his "Reply"† to Mr. Cooke's pamphlet, says that "Mr. Cooke's principle (the principle of reciprocal communication) was no novelty, having formed part of previous inventions, . . especially having been developed completely and effectively by Mr. Ronalds in his telegraph, the description of which was published as early as 1823." In this "Reply" Prof. Wheatstone makes further references to the prior labours of Ronalds. See pp. 9, 17, 24, 64, and 66. Wheatstone, then a boy of about 15, was present at many of the principal experiments at Hammersmith.

It is a singular fact that Ronalds was well acquainted with Mr. Cooke, the father of the late Sir William Fothergill Cooke, as is shown by the following extract from Ronalds' diary, dated Dec. 14, 1855:—

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* Journal of the Society of Telegraph Engineers, Part xxviii. vol. viii. p. 361, 1st part, 1879.

† Reply to Mr. Cooke's Pamphlet, "The Electric Telegraph: Was it Invented by Professor Wheatstone?" Demy 8vo. London, 1855.

"At about the time of my having completed my electric telegraph, Mr. Cooke, then a surgeon at Brentford, well acquainted with our family, and father of Mr. W. F. Cooke, called on us at the Upper Mall, Hammersmith, on which occasion I explained to him minutely and proved the perfect practicability for general use of my telegraph, making him the recipient of many messages by it, from the room over the coachhouse to the little toolhouse at the end of the garden, and receiving messages in return from him. Mr. W. F. Cooke was a very young boy at this time."

In a letter to Mr. Ronalds, dated 11th December, 1866, Mr. (afterwards Sir) Wm. F. Cooke, writes:—

"Many years ago, when you were a young man and I was a boy, my father, afterwards Dr. Cooke, of Durham, lived at Brentford. I think I recollect your living at Mrs. Hanin's cottage in the Butts. If I am right it is a singular fact that two men so much associated with the Electrical Telegraph should have been resident in the same small town. I have often thought what a fortunate thing it would have been if I had known of your labours in 1837. Letters of the alphabet, three letters in a row, might have been distinguished by your clocks by movement of a needle to the left, the middle row of the letters by a flourish of the needle right and left, and the letters to the right by the needle pointing in that direction."

Mr. Ronalds, in his reply to this letter dated 3rd January, 1867, says:—

"It must have been your acquaintance with my cousin Dr. Henry Ronalds to which you refer; but I had the honour of knowing your respected father, and well remember an obliging visit from him when, in 1816, I resided at Hammersmith Upper Mall, on which occasion I explained and exhibited to him the Electric Telegraph in operation which I had completed. I recollect also that he expressed much satisfaction at what he saw. You were good enough to say it would have been a fortunate thing if, in 1837, you had known of my

previous labours. I much regret that you had not then seen my little work of 1823, in which they were fully detailed. Mr. Wheatstone, whom I had long known, was well acquainted with what I had done: it would seem, indeed, that two figures in the second plate of that pamphlet were closely imitated in your specification of 1840."

It should be added that Ronalds took out no patent, but was contented with publishing his invention to the world. The first patent for an electric telegraph was granted to Cooke and Wheatstone in 1837, for "Improvements in giving Signals and Sounding Alarums in distant places by means of electric currents transmitted through metallic circuits."

While there can be no doubt that Wheatstone was perfectly acquainted with the previous labours of Ronalds, the fact that Cooke was not so acquainted is to a great extent proved by the following letter from Mr. Cooke, written more than three years after the date of Cooke and Wheatstone's first patent, and which exists among the manuscript papers in the Ronalds Library:—

"1, *Copthall Buildings, 4th December*, 1840.

MY DEAR SIR,—I have been trying for some time to borrow an account of Mr. Ronalds' electric telegraph published by him.

Meeting you yesterday reminded me that you were acquainted with Mr. R., and I shall esteem it a favour if you will procure the loan of it for me as soon as you can.

The Parcel Delivery Co. would deposit it at the above address, or at 51, Notting Hill-square.

Yours very truly,

George Cooper, Esq. WM. F. COOKE."

Mr. Cooper was known to Ronalds, and the above letter undoubtedly came into the latter's possession when the book referred to was borrowed for Mr. Cooke.

It only remains to be added that after a lapse of nearly fifty years

a portion of this telegraph was discovered in the garden at Hammersmith. It is thus described by Mr. J. A. Peacock in a letter to Sir Francis Ronalds of the 6th December, 1871, informing him that a portion of his telegraph, together with a copy of his book, had been placed in the Museum of the Pavilion at Brighton :—

"About five or six years ago I was in the garden (then rented by a friend of mine) wherein this telegraph was laid down, when it was dug for and found after a lapse of upwards of forty years, what was then found and seen agreeing with the descriptions given in the book. Several yards of copper-wire were found where the ground had not been disturbed, by reason of a large rustic garden seat and alcove having been over it; a glass tube, or the greater part of one, with the copper wire in it (page 6*) ; and one of the joints with a short tube (glass) (plate 2, fig. 1*) were also found : the copper-wire seemed to be in perfect order. The wooden trough and pitch (page 6*) had become consolidated with the earth, which was as hard as, and formed an opening like that of a drain tile, or the run of a burrowing animal."

This specimen, together with the original model of the dial made by Ronalds in 1816, is now in the possession of Mr. Latimer Clark, M.I.C.E.

Mr. Thomas Gibson, writing on the 1st April, 1870, says :—

"How well I remember when a schoolboy, fifty-five years ago, seeing the clock apparatus in your little upper room over the stable, connected with another at the bottom of the garden, of the meaning of which I had but a very hazy apprehension; also the lines of wire stretched from frame to frame across the grassplot."

In 1825 Ronalds invented a perspective tracing instrument to facilitate drawing from nature, or from plans and elevations, a description of which he published, in 1828, in a work entitled "Mechanical

* Description of an Electrical Telegraph, &c. By Francis Ronalds. 1823.

Perspective." During his travels he gave considerable attention to the curious Celtic antiquities, as at Stonehenge and other places, and he was enabled by means of his perspective tracing instrument, assisted by Dr. Blair, to procure exact perspective projections, taken from given noted stations, of the Celtic remains at Carnac, in Brittany. The result of these labours was published by Mr. Ronalds and Dr. Blair in 1836, entitled "Sketches at Carnac; or, Notes concerning the present state of the Celtic Antiquities in that and some of the adjoining Communes." A description of this instrument was also published in a small quarto pamphlet, with illustrations.

Ronalds appears to have been an excellent workman, turning being his favourite pursuit. He has left behind several small specimens of his work, which show a high state of proficiency in the art. He contemplated the publication of a work upon this subject, and although a considerable portion was put into type, and several drawings for it were made, it was never published. There is no doubt he intended to make this work a most complete practical treatise on the subject, introducing many new contrivances and arrangements for delicate turning, and he also had the idea of adding an appendix of the names of tools, &c. in several languages, a part of this having been commenced.

At a meeting of the Council of the British Association for the Advancement of Science, held March 28th, 1842, Sir Roderick Murchison stated that he had reason to believe that the "building in Richmond Park formerly used as a Royal Observatory"* might, upon proper application being made to Her Majesty, be placed at the disposal of the British Association for scientific purposes; the Royal Society, to whom the building had in the first instance been offered, having declined its acceptance. An application was afterwards made, and the Kew Observatory was, on the 26th May, 1842, placed at the

* This observatory was built for George III. about 1780, by Sir Wm. Chambers.

disposal of the Association. Early in 1843 Ronalds was appointed its first Honorary Director and Superintendent, which post he held for nine years. During this period he made several full and exhaustive reports to the British Association, of which body he was for many years a Member of Council.

In the report read at the annual visitation of Greenich Observatory, June 1, 1844, the Astronomer Royal says:—

"In the autumn of last year I had an opportunity of examining the beautiful arrangements of the atmospheric electrometer at the Kew Observatory, which have been made under the superintendence of Professors Wheatstone* and Francis Ronalds, Esq., and it was impossible to see these without perceiving that considerable improvements might be made in our own by following the same plan, with such alterations as the difference of local circumstances rendered necessary."

In the appendix to Kaemtz's Meteorology,† Mr. C. V. Walker, F.R.S., says:—

"The electricity of the atmosphere is a branch of meteorology which has been cultivated on no settled and systematic manner until the present time. Indeed the observations that have been made at the Kew Observatory, a description of which it is our present purpose to give, constitutes so novel a feature in the science that Mr. Ronalds, whose whole time and talents appear to be enthusiastically devoted to perfecting them, says in the report submitted to the British Association at the meeting at York (1844), that they must be rather regarded as experimental and educational than otherwise. As the admirable arrangements at this Observatory will form a model for the guidance of others, we will give them in detail."

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* Ronalds always denied, and has left his denial on record, that Wheatstone had any share whatever in the invention of the apparatus at Kew for registering atmospheric electricity.

† A Complete Course of Meteorology by L. F. Kaemtz, translated with notes and additions by C. V. Walker. London. 8vo. 1845.

On the 1st February, 1844, he was elected a Fellow of the Royal Society, and was admitted on the 29th, at the same time as Dr. Carpenter.

It is not generally known that Ronalds, during the time he occupied the position of Director of Kew Observatory, invented many important instruments, which have in no small measure advanced the science of meteorological and magnetical observation; his system of self-registration by photography* alone being sufficient to render his name famous.

In pursuance of proposals made to the British Association in 1840-1 and 1844,† Ronalds commenced in 1845, at Kew Observatory, a series of experiments on the photographic registration of all meteorological and terrestro-magnetical instruments. The first successful attempts were made in August, 1845, upon an atmospheric voltaic electrometer, a thermometer, a barometer, and a declination magnetometer. On the 24th September of the same year he obtained the first good specimen of registered atmospheric electricity, and on the 25th and frequently afterwards the apparatus which he had constructed enabled him to observe that under certain circumstances the electric potential increased with the light of the sun, but that such increased potential did not continue.‡

The Royal Society made a grant of £50 from the Wollaston Donation Fund to assist in the construction of the apparatus devised by Ronalds, for the self-registry of magnetical and meteorological instruments. In 1851 the Royal Society made a further grant of £100 to Ronalds for the purpose of an experimental trial of his self-registering instrument for six months. These experiments were commenced in April, and were being continued in January, 1852.

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* Philosophical Transactions of the Royal Society for 1847, Part i. p. 111.

† *Vide* Report of British Association held at Southampton, 1846.

‡ *Vide* pp. 7 and 8, Epitome of the Electro-Meteorological and Magnetical Observations, Experiments, &c., made at Kew Observatory under the direction of Francis Ronalds, 8vo. pamph., Chiswick, 1848.

With reference to these grants it may be well to mention that Ronalds bequeathed a sum of £500 to the Royal Society, as set forth in the following extract from his will:—"I bequeath to the President, Council, and Fellows of the Royal Society the sum of five hundred pounds, in trust, for the augmentation of the Wollaston Fund, and in recognition of the advantages I derived, when Honorary Director of the Kew Observatory, from grants which I received from that Fund in aid of my not unsuccessful inventions of photographic instruments for the registration of terrestrial magnetism, atmospheric electricity, and other meteorological phenomena."

From a minute of the Council of the British Association at the meeting at Belfast, September 1, 1852, the following is extracted:—

"The experimental trial of Mr. Ronalds' magnetograph, which was in progress when the last report of the Council was made, has been completed, and detailed statements of the performance of each of the three instruments have been furnished by Messrs. Ronalds and Welsh, and are inserted in the Report of 1851. The Council have great pleasure in referring to these statements, as showing that Mr. Ronalds' adaptation of photography to record the magnetic variations is an effective and practically useful invention, supplying to those who may desire it the means of making and preserving a continuous registry of the phenomena."

During August, 1846, many of the magnetic photographs were submitted to a rigid comparison with the corrected readings of the Greenwich Observatory by Mr Glaisher, the result being, as declared by him, "highly satisfactory."*

The self-registering barometer was in 1870, and probably now is, employed in the Meteorological Observatories instituted by the Board of Trade.

At a meeting of the Council of the British Association on the 8th

* Report of the Committee of the Kew Observatory, Aug. 9, 1849, signed on behalf of the Committee by Sir J. F. W. Herschel.

May, 1846, it was resolved "That the Kew Observatory be maintained in its present state of efficiency;" because, after stating several other reasons, it appeared, both from the publications of the British Association and from the records of the establishment, that the systematic inquiry into the intricate subject of atmospheric electricity carried out by Mr. Ronalds had been productive of very material improvements in that subject, and had, in effect, furnished the model of the processes conducted at the Royal Observatory, and because those inquiries were still in progress.

The Toronto and Madrid Observatories were furnished with the self-registering instruments of Ronalds, the manufacture of them being carried out under his superintendence. Besides which he received application for advice and assistance from the Sardinian Government respecting meteorological instruments; also from the Oxford Observatory for a barometrograph and thermometrograph; and from the Astronomer at Trevandrum for electrical apparatus similar to that at Kew.*

Some of the original models of Ronalds' instruments are now in the South Kensington Museum.

The electrometers and electric-spark measurers used at the Greenwich Observatory in 1844, and for many years afterwards, were constructed from plans designed by Ronalds, and similar to those he had constructed for the Kew Observatory.

On the application of the Marquis of Northampton and Sir John Herschel, Her Majesty's Government granted to Ronalds a pecuniary recompense of £250 for his invention of photographic self-registering magnetical and meteorological apparatus. It will be remembered that Mr. Brooke also received a pecuniary recompense from the Government for his apparatus for similar purposes, which were invented about the same time, and which are fully described in

* See Minute of Council of British Association, November 29, 1852.

the Philosophical Transactions for 1846. As regards the priority of invention or the relative merits of the two systems, it may be observed that the matter had long before 1846 occupied the attention of Ronalds, and that we find him in 1840-41 and 1844 making proposals to the British Association on the subject, and that his first successful photographs were produced in August, 1845.

His apparatus for taking electrical observations was also adopted at the Royal Observatory at Greenwich.

In 1847 Ronalds made with Dr. Birt an experiment in which they sought to maintain a kite at an almost invariable given altitude, by the employment of three cords attached to it, and to points forming a triangle on the earth. This experiment was quite successful, and a short account of it was published in the Philosophical Magazine for September, 1847.

In 1852 Ronalds retired from the direction of Kew Observatory, where he had for nine years contributed so much to the advancement of electrical and magnetical observation, and his several reports to the British Association bear witness to the extent of his knowledge of the subject, and to the interest he felt in everything appertaining to it. On his retirement he received a grant from the Crown, on the recommendation of Lord Derby's Government, of a small pension of £75 per annum, for (as is stated in the warrant) his "eminent discoveries in electricity and meteorology."

After his retirement from Kew he lived for many years abroad, principally in Italy, where he continued the compilation of his Catalogue of Works on Electricity, Magnetism, and the Electric Telegraph, which, together with the formation of the "Ronalds Library," afforded him occupation during the remainder of his life.

There are in the library of the Society several interesting and curious unpublished MSS. upon various subjects by Ronalds, among which may be mentioned, the heads of a proposed History of

Electricity, Journal of a Tour in the Mediterranean, Egypt, Syria, Greece, &c. in 1810-20; Fires, Meteorology, Drawing, Surveying, &c.

A short biographical sketch of Ronalds (and others) was published by Wm. Walker,* to accompany the well-known engraving of "The Distinguished Men of Science of Great Britain, living in 1807-8, assembled at the Royal Institution," in which Ronalds' portrait appears; and it is interesting to note that for a great number of years Ronalds was the only surviving member of the group.

In 1866 a letter was addressed to Lord Derby, modestly setting forth the early labours of Ronalds, but Mr. Barrington, in a letter to Mr. Samuel Carter, says that Lord Derby "declines re-opening the question of honours for the invention of the electric telegraph, in consequence of the length of time that has passed since the name of Ronalds has been connected with the invention."

At the Paris International Exhibition of 1867, the British Commissioners placed in one of the windows of the Machinery Gallery allotted to Great Britain a blind upon which was painted a diagram showing the instruments used by Ronalds in his telegraph of 1816.

In February, 1870, a memorial was addressed to the Right Hon. W. E. Gladstone on the subject of the invention of the electric telegraph, and on March 31, 1870, Ronalds received the honour of knighthood; Her Majesty's intention of conferring this mark of distinction being conveyed to him in a letter from Mr. Gladstone as follows:—

"*Carlton House Terrace, S.W., March 28th*, 1870.

SIR,—I have great pleasure in announcing to you, that in acknowledgment of your early and remarkable labours in telegraphic

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* Memoirs of the Distinguished Men of Science of Great Britain living in the year 1807-8, and Appendix, compiled and arranged by William Walker, jun. 2nd edition. London, 1864.

investigations, Her Majesty will be pleased to confer upon you the honour of knighthood.

It is highly agreeable to me to make this communication, and
I have the honour to be, Sir,
Your very obedient and faithful servant,
W. E. GLADSTONE."

Sir William Fothergill Cooke, in a congratulatory letter to Sir F. Ronalds, says: "It is a singular fact that Brentford should have furnished two of the men who were most practical in their original views; I might say *the only two men* who up to the year 1837 realised in their minds the electric telegraph as a *future fact*.

"I have before said that you were *before* the time. Had you taken the subject up again in 1835, it would have been all your own, I fully believe, or had we jointly taken it up in 1836, we should have divided the honours.

"May you long be spared to enjoy the ephemeral honour: which, however, so granted, links your name with one of the greatest adaptations of science the world can ever know; next in usefulness to printing; in its character, the most marvellous development of the Creator's powers vouchsafed to the practical service of man. To Him be the glory! to us the deep and abiding satisfaction of being His instruments."

During the fierce controversy which raged between Cooke and Wheatstone as to their relative merit in the invention of *their* electric telegraph, the modest claims of Ronalds—the pioneer—were well-nigh forgotten; and he had to thank his good constitution for having lived to see his early labour recognised. However valueless the honour of knighthood may have been to a man 83 years of age, it is still gratifying to know that that honour, though tardily given, was appreciated by one who has rendered such signal service to electrical science, and who must always stand as the first of English Telegraph Engineers.

In the *Illustrated London News* of the 30th April, 1870, will be found a good portrait of Ronalds, together with a description of his telegraph illustrated from the plates given in the work of 1823.

There is a fine marble bust of Ronalds in the library of the Society of Telegraph Engineers, by Mr. Edward Davis, presented to the Society by their first president, Dr. C. W. Siemens, F.R.S.

There is also in the possession of Mrs. Samuel Carter a fine oil painting of Ronalds by Mr. Hugh Carter.

Ronalds, who was never married, was a man of extremely sensitive temperament and of very retiring manners, and this may in a great measure account for his inventions never having been brought prominently before the public. His whole life was devoted to science, without any pecuniary reward, with the exception of the small Civil List pension, his small patrimony being expended in his experiments, and in the formation of the Ronalds Library.

He resided during the last ten years of his life at Battle, in Sussex, in order to be near his sister, the wife of Mr. Samuel Carter. His niece, Miss Julia Ronalds, lived with him up to the time of his death, and devoted herself to his declining years, besides materially assisting him during the latter part of his life in the compilation of his Catalogue. He died on the 8th August, 1873, and was buried at Battle.

THE

RONALDS CATALOGUE.

Works marked thus † are in the Library.
" " " * are Meteorological, &c.

† **Abbadie,** A de. Sur le Tonnerre en Ethiopie. 4to. 158 pp. *Paris,* 1858
Mémoire sur un Météore (le Quobar) qu'il a aperçu sur différents points du globe: et Rapport sur le Météore. M. Petit, Rapporteur. 8vo. 9 pp. (*Toulouse, Acad. 3me Série,* v. 303.) *Toulouse,* 1849

† **Abeille,** J. L'electricité appliquée à la thérapeutique chirurgicale, et, en particulier, au traitement des accidents produits par les inhalations d'éther et de chloroforme. 8vo. 110 pp. *Paris,* 1870

† **Abel,** F. A. Account of recent researches on the application of Electricity from different sources to the Explosion of Gunpowder. 8vo. 35 pp. *(Reprinted from the Quarterly Journal of the Chemical Soc.)* *London*

Abernethy, John. *Born* 1763 *at Abernethy; died April* 20, 1831, *at Enfield.* *(Very celebrated Surgeon in London.)*
Surgical and physical essays. *London,* 1796
Inquiry into the rationality of Mr. Hunter's theory of life. (*Zantedeschi, Trattato* ii. *Torpedo.*)

† **Abich,** H. Ueber einen bei Stawropol gefallenen Meteorstein. 8vo. 37 pp. *Mosk (Moscow),* 1860

† Die Fulguriten im Andes und kleinen Ararat, nebst Bemerkungen über örtliche Einflüsse bei der Bildung elektrischer Gewitter. 8vo. 11 pp. *Wien,* 1869

Abilgaard, Peter Christian. *Born December* 22, 1740, *at Kopenhagen; died January* 21, 1801, *at Kopenhagen.*
Tentamina electrica. (*Vide* Van Troostwyk and Krayenhoff, 1788.)

† **Abraham,** J. H. On new phenomena caused by the effect of Magnetic and Electric Influence, and suggestions for ascertaining the extent of the terrestrial magnetic atmosphere. 8vo. 6 pp. (*Phil. Mag.* i. 266.) *London,* 1827

† (On) Neutralizing the Magnetism of Watch-work. 8vo. 1 p. (*Phil. Mag.* i. 470.) *London,* 1827

† **Abria.** Anémomètre electro-magnétique. (*Vide* Moigno, 1852.) *Bordeaux*
Sur quelques propriétés physiologiques des courants d'induction. 8vo. 11 pp. *(Actes de l'Acad. de Bordeaux.)* *Bordeaux,* 1842

† Recherches galvanométriques sur les lois de l'induction des courants par les courants. 8vo. 11 pp. (*Actes de l'Acad. de Bordeaux.*) *Bordeaux,* 1844

† Sur la déclinaison, l'inclinaison, et l'intensité magnétique à Bordeaux, 8vo. 8 pp. (*Actes de l'Acad. de Bordeaux.*) *Bordeaux,* 1848

Abria—*continued.*

† Rapport sur un Discours de *Gavarret* le 14 Novembre, 1848. 8vo. 4 pp. (*Actes de l'Acad. de Bordeaux.*) *Bordeaux*, 1852

† Rapport sur l'appareil Fragneau destiné à prévenir les rencontres des trains de chemins de fer. 8vo. 8 pp. (*Actes de l'Acad. de Bordeaux.*) *Bordeaux*, 1853

† Démonstration de plusieurs formules de *Gauss* relatives à l'action mutuelle de deux aimants. 8vo. 16 pp. (*Ext. des Mém. de la Faculté de Bordeaux.*) *Bordeaux*, 1861

† Various Observations of Inclination and Declination. *Bordeaux*

Academia de Madrid. Memorias de la Real Academia de Ciencias. 4to. *Madrid*, 1850-51

Academia Moguntina Scientiarum. (*Vide* Erfurt.)

Academia Naturæ Curiosorum. (*Vide* Breslau.)

Académie de Paris. (*Vide* Paris Academy.)

Académie de Toulouse. Histoire et Mémoires. (*Vide* Toulouse Academy.)

Academy, Swedish. (*Vide* Schwedischen Akadem and Svenska Academien.)

Accademia degli Aspiranti Naturalisti di Napoli. Annali; Bullettini; Esercitazioni. (*Vide*, for each head, Naples, Accademia degli Aspiranti.)

† Atti dei Congressi degli *Scienziati Italiani* raccolti dall' Accademia. Con Note dell' Editore Presidente della stessa (*i.e. Dr. Leonardo Dorotea.*) 4to. 6 vols. *Napoli*, 1844-45

Accademia del Cimento. Saggi di naturali esperienze, descritte dal Segretario. 8vo. 2 vols. *Milano*

† Saggj di naturali esperienze fatte nell' Accademia del Cimento, e descritte dal Segretario. fol. 269 pp. *Firenze*, 1666

† Saggj di naturali esperienze fatte nell' Accademia del Cimento, sotto la protezione del Serenissimo Principe Leopoldo di Toscana, e descritte dal Segretario di essa Accademia. fol. 269 pp. (*reprint*) *Firenze*, 1667

† Essays of natural experiments made in the Accademia del Cimento. (Englished by Rd. Waller.) 4to. 19 plates. 180pp. *London*, 1684

† Saggj di naturali esperienze, descritte dal Segretario. 2ª edizione. fol. 269 pp. *Firenze*, 1691

† Tentamina, &c. *Musschenbrock.* 4to. (*Vide* Musschenbrock, 1731.) 1731

† Saggi di naturali esperienze fatte nell' Accademia del Cimento, e descritte dal Segretario di essa Accademia. With life of *Magalotti*, by Manni. 8vo. *Venezia*, 1761

Saggi, with additions by Tozzetti. Aggrandimenti, Notizie, &c. 4to. (*Vide* Tozzetti, 1780.) 1780

Saggi di naturali esperienze fatte nell' Accademia del Cimento. Terza edizione *Fiorentina*: preceduta da notizie istoriche dell' Accademia stessa e seguitata da alcune aggiunte (di Gazetti Antinori.) 4to. *Firenze*, 1841

Aggiunte ai Saggi. (*Vide* Gazzori, 1841.) *Firenze*, 1841

† Intorno ad una nuova edizione dei Saggi. Relazione di Belli. 8vo. 14 pp. (*Giorn. I. R. Instit. Lomb.* iii. 183.) *Milano*, 1842

Accademia Italiana. Atti dell' Accademia Italiana. 4to. *Firenze*, 1808

Accademia Reale di Modena. (*Vide* Modena Academy).

Accademia di Napoli. Atti dalla fondazione sino al 1787; Atti della Sezione Borbonica; Rendiconto delle Adunanze, 1842; Memorie dal 1852 in avanti. (*Vide*, for each head, Naples Academy.)

Accademia di Padova. Saggi; Memorie; Nuovi Saggi; Rivista Periodica; Catalogo di Libri. (*Vide*, for each head, Padua Academy.)

Accademia Petropolitana. (*Vide* Petersburg Academy.)

Accademia Pontificia dei Nuovi Lincei. Atti dell'. 4to. *Roma*

Accademia di Siena. (*Vide* Siena.)

Accademia Théodoro Palatina. (*Vide* Manheim.)

Accademia di Torino. (*Vide* Turin Academy.)

† **Acerbi** G. Notice of. *Born at Castelgoffredo May* 8, 1773; *died August* 25, 1847. Published in London in 1802, in English, Journey to the North Cape by Sweden, Finland, and Lapland (query anonymously). He established the Biblioteca Italiana in 1816. (*Giorn. I. R. Instit. Lomb.* xvi. 13.)

Achard, Franz Carl. *Born April* 28, 1753, at Berlin; *died April* 20, 1821, *at Kunern.*

Abhandlung der Theoretischen und Practischen Lehre von der Electricität.

Von den Electrischen Erscheinungen, die durch Reiben des Quecksilbers auf verschiedene, vorzüglich harzige Körper hervorgebracht werden. (*Beschaft. der Berliner Gesellsch. Naturf.*) *Berlin*, 1775

Sur l'électricité de la Glace. (*Journ. litt. de Berlin*, 1776.) *Berlin*, 1776

Ueber die Kraft der Elektricität verglichen mit der Schwere. (*Beschaft. Naturf. Gesellsch. Berl.* i. 1775.) *Berlin*, 1775

Von den Elektrischen Erscheinungen durch Reiben des Queckailbers. (*Beschaft. Naturf. Gesellsch. Berl.* ii. 1775.) *Berlin*, 1775

Ueber die Kraft der Elektricität, verglichen mit der Kraft der Schwere. 8vo. (*Reuss. Rep.* iv. 351.) *Berlin*, 1775

Expériences sur l'Electrophore, avec une théorie de cet instrument. 4to. (*Mem. de Berlin*, 1776, 122.) *Berlin*, 1776

Expériences sur la célérité avec laquelle les corps de différentes figures se chargent du fluide électrique; et sur le rapport entre la quantité qu'ils en absorbent et la distance à laquelle ils sont d'un corps électrisé. 4to. (*Mem. de Berlin*, 1777, 25.) *Berlin*, 1777

Sur l'analogie qui se trouve entre la production et les effets de l'électricité et de la chaleur; avec la description d'un instrument nouveau propre a mesurer la quantité de fluide électrique que peuvent conduire des corps de différentes natures placés dans les mêmes circonstances. 4to. (*Mem. de Berlin*, 1779, 27.) *Berlin*, 1779

† Dissertazione sulla differenza fra i corpi elettrici e i conduttori. 4to. 11 pp. (*Opus. Scelti*, iii. 313.) *Milano*, 1780

Expériences qui prouvent que les corps se chargent en raison de leur surface. 4to. (*Mem. de Berlin*, 1780, 47.) *Berlin*, 1780

Sammlung physik. und chemischer Abhandlungen. 8vo. *Berlin*, 1784

† Schriften (chymisch-physik). 8vo. *Berlin*, 1780

Vorlesungen über die Experimental-Physik. 8vo. *Berlin*, 1791

Kurze Anleitung, ländliche Gebäude gegen Gewitter-Schaden sicher zu stellen. 8vo. 78 pp. *Berlin*, 1798

Mémoire renfermant le récit de plusieurs expériences électriques faites dans différentes vues. 4to. (*Mem. de Berlin*, 1781, 9.) *Berlin*, 1781

† Articolo di Lettera al Landriani sull' Elettricità. 4to. (*Opus. Scelti*, v. 351.) *Milano*, 1782

† Relazione delle Sperienze dell' Achard, per decidere se i corpi ricevano, e dispersdano l'elettricità in ragione delle superficie, o delle masse. 4to. (*Opus. Scelti*, vi. 199.) *Milano*, 1783

Observations sur l'électricité terrestre (*Mem. de Berlin*, 1786, 13.) *Belrin*, 1786-87

Sur l'irritation des nerfs et les contractions musculaires. 4to. (*Mem. de Berlin*, 1790-91, 1, 14, 27.) *Berlin*, 1790-91

Ackermann, Johann Friedrich. *Born February* 3, 1726; *died June*, 1804, *at Kiel.*

On the Contact Theory. (*Salzb. Mediechirurg.*, 1792, 287.) *Salzburg*, 1792

Versuch einer physischen Darstellung der Lebenskräfte organisirter Körper. 2 (or more) vols. 8vo. *Frankfurt*, 1798

Ackermann—*continued.*

Nachrichten von der sonderbaren Wirkung eines Wetterstrahles. 8vo. *Kiel*, 1772
Programma, quo morbus et sectio fulmine nuper adusti enarratur. 4to. *Kilæ*, 1774

Acqua. (*Vide* Dell' Acqua.)

Acta eruditorum Lipsiensia. (*Vide* Leipsig.)

Acta Helvetica. (*Vide* Basle.)

Acton, J., and **Lofft**, Capel. On the probability of Meteorolites being projected from the Moon. Galvanic and electrical experiments by Mr. Acton. 8vo. (*Phil. Mag.* li. 109.) *London*, 1818

Adams, Dudley. Electricity in the formation of nature. 8vo. 15 pp. *London*, 1820

A trifle or sketch, wherein the science and elements of Electricity are developed in a few books. 4to. *London*, 1823

Adams, George. *Born in* 1750 *at Southampton; died August* 14, 1795, *at Southampton.*

† An Essay on Electricity; to which is added an Essay on Magnetism. 1st edition, 8vo. 367 pp. *London*, 1784

† An Essay on Electricity and the mode of applying it to medical purposes; with an Essay on Magnetism. 2nd edition, corrected and enlarged. Frontispiece and 7 plates. 8vo. 476 pp. *London*, 1785

† Versuch über die Elektricität durch eine Menge methodisch-geordneter Experimenta erläutert; nebst einen Versuch über den Magnet. 6 plates, 8vo. 270 pp. *Leipzig*, 1785

† An Essay on Electricity; with an Essay on Magnetism. 3rd edition. Frontispiece, 7 plates, and 1 plate (belonging to the Supplement). 8vo. 468 pp. *London*, 1787

† Essay on Electricity; to which is now added a Letter to the Author from Mr. John Birch on the subject of Medical Electricity. 4th edition. 5 plates and frontispiece. 8vo. 588 pp. *London*, 1792

An Essay on Electricity; to which is added a Letter to the Author from Mr. John Birch on the subject of Medical Electricity. The 5th edition, with corrections and additions, by Wm. Jones. 8vo. 7 plates. 594 pp. *London*, 1799

Adamson, J. C. Notes on certain modes of measuring minute Intervals of Time. 4to. (*Trans. American Phil. Soc., New Series*, xi.) *Philadelphia*, 1857

Adanson, Michel. *Born April* 7, 1727, *at Aix; died August* 3, 1806, *at Paris.* (Poggendorff, i. 11, says that he first made known, in 1751, the Silurus electricus, and compared its shock with that of the Leyden phial. *Vide* Humboldt's Voyage au Senegal, pt. ii. Zoologie, p. 59. "Il a le mérite d'avoir reconnu le premier, en 1751, l'analogie des effets de ces poissons (le Gymnotus) avec ceux d'une bouteille de Leyde, mérite que l'on a faussement attribué à S'Gravesande et à Walsh."—Voyage au Sénégal about 1757. *Vide* Humboldt.)

† **Addenet**, R. F. Nouvelle théorie de l'Electricité et de la Nécessité des Forêts pour l'Agriculture et le Bien-être général. 8vo. 150 pp. *Paris*, 1843

† **Adley**, C. C. The story of the Telegraph in India. 94 pages and 1 map. 8vo. *London*, 1866

Admiralty Manual of Scientific Enquiry. *Vide* Herschell, Sir John.
Ditto. Deviation of the Compass. *Vide* Evans and Smith.

Adsigerius, Peter. (This is Peter Peregrinus. *Vide* Wenckebach.)

† **Æpinus**, Franz Ulrich Theodor. (*Born December* 13, 1724, *at Rostock; died August* 10, 1802, *at Dorpat.*)

Mémoires concernants quelques nouvelles expériences électriques remarquables. 4to. (*Mem. de Berlin*, p. 105.) *Berlin*, 1756

† Sermo Academ. de similitudine vis electricæ atque magneticæ. 4to. 32 pp. *Petropoli*, 1758

Descriptio ac explicatio novorum quorumdam experimentorum electricorum. 4to. 26 pp. (*Novi Comment. Acad. Petrop.* vii. 1761, 22 and 277.) *Petropoli*, 1758-59

Æpinus—*continued.*

† Tentamen theoriæ electricitatis et magnetismi. Accedunt Dissertationes duæ quarum prior phænomenon quoddam electricum, altera, magneticum, explicat. 7 plates. 4to. 390 pp. *Petropoli*, 1759

Rede über die Aehnlichkeit der magnetischen Kräfte. 8vo. *Leipzig*, 1760

† Recueil de différents Mémoires sur la Tourmaline. 5 plates. 8vo. 193 pp. *Petersburg*, 1762

† Additamentum ad Dissertationem de experimento magnetico, celeberr. Domini du Fay, continens nova experimenta magnetica detecta et explicata. 1 plate. 4to. 12 pp. (*Novi Comment. Acad. Petrop.* ix. 1864, p. 340.) *Petropoli*, 1762-63

Similitudinis effectuum vis magneticæ et electricæ: novum specimen. 4to. (*Novi Comment. Acad. Petrop.* x. 296. *Petropoli*

† Abhandlung von den Luft-Erscheinungen. 4to. 16 pp. *Petersburg*, 1763

† De electricitate barometrorum disquisitio. 4to. 22 pp. (*Novi Comment. Acad. Petrop.* xii. 1768, p. 303.) *Petropoli*, 1766-67

† Examen theoriæ magneticæ a celeberr. Tob. Mayero propositæ. 4to. 26 pp. (*Novi Comment. Acad. Petrop.* xii. 1768, p. 325.) *Petropoli*, 1766-67

Descriptio novi phænomeni electrici detecti in Chrysolitho sive Smaragdo Brasiliensi. 4to. 5 pp. (*Novi Comment. Acad. Petrop.* xii. 1768, 351.) *Petropoli*, 1766-67

Exposition de la Théorie de l'Electricité de M. Æpinus. *Paris*, 1787

Tentamen theoriæ Electricitatis et Magnetismi. 4to. *Petersburg and Leipzig*, 1787

Tentamen theoriæ Electricitatis et Magnetismi. 4to. *Petersburg*, 1791

Descriptio acuum magneticarum noviter inventarum, quæ vulgaribus præsantiores sunt, atque artificii, vires magnetum naturalium insigniter augendi. (*Acta Academiæ Moguntinæ*, ii. 255.)

Aernest, S. The Comet and Cometic Electricity. 8vo. *Edinburgh*, 1857

Affaidaties (Affaidatus). Physicæ et astronomicæ considerationes. (Contains "*De peculiari magnetis ad polum descensu, seu mavis de ipsius magnetis ad polum conversione, et De causa cur magnes ad se ferrum attrahat.*") *Venice*, 1549

Agobard. *Vide* St. Agobard.

Agmini. *Vide* Erckmann and Agmini.

Agricola, Jh. Theoria fulminum per Electricitatem illustrata. *Heidelberg*, 1771

Agut. *Vide* D'Agut.

Ahrens, J. E. W. Dissertatio Observationes et experimenta de qualitate et quantitate electricitatis corporis humani, in statu sano et morboso. *Kiel*, 1813

Aimé, Georges. *Born about* 1813; *died September* 9, 1846, *between Algiers and Médéah.*

† Mémoire sur le Magnétisme terrestre. (Relative to his observations made in 1841-2 in Algiers.) 8vo. 12 pp. (*Ext. Ann. Chim.* 3me série, tom. x.) *Paris*

† Recherches de Physique sur la Méditerranée. fol. *Paris*, 1845

Observations sur le Magnétisme terrestre. fol. 229 pp. *Paris*, 1846

Note sur un nouveau procédé d'aimanter. 4to. (*Vide* Dove, p. 260, and Pogg. i. 20.) *Paris*

De la masse du fluide électrique. 4to. (*Vide* Pogg. i. 20.) *Paris*

† **Airy,** Sir George Biddell. *Born July* 27, 1801, *at Alnwick.*

Account of experiments on Iron-built Ships, instituted for the purpose of discovering a correction for the Deviation of the Compass produced by the iron of the ships. 4to. 47 pp. (*Phil. Trans.* 1839, part 1.) *London*, 1839

† Description of the instruments and process used in the photographic self-registration of the magnetical and meteorological instruments at the Royal Observatory, Greenwich. 4to. 8 pp. 3 plates. (*Ext. from Introduc. to Greenwich Mag. and Met. Observations* for 1847.) *London*, 1849

Airy—*continued.*

† Results of Experiments on the Disturbance of the Compass in Iron-built Ships. Made at the desire of the Board of Admiralty. 4to. 16 pp. *London*, 1840

On the equations applying to light under the action of Magnetism. 8vo. (*Phil. Mag.* xxviii.) *London*, 1846

† Addresses to the individual Members of the Board of Visitors to the Royal Observatory, Greenwich, by the Astronomer-Royal, and Reports of the same read at the annual visitations. *London*

† Results of the Magnetical and Meteorological Observations made at the Royal Observatory, Greenwich, for the years 1840 to 1850 inclusive. 10 vols. *London*

On the Deviations of the Compass in several ships. 4to. *London*, 1855

† Description of the Galvanic Chronographic Apparatus of the Royal Observatory, Greenwich. Forming the Appendix to the Greenwich Observations, 1856. 4to. 8 pp. *London*, 1857

† Results of the Magnetical and Meteorological Observations made at the Royal Observatory, Greenwich. 4to. 1870

† A Treatise on Magnetism. 8vo. 220 pp. *London*, 1870

Vide also Christie and Airy.

Akademie der Wissenschaft zu München. Neue Abhandlungen, Denkschriften, Bulletins. *Vide* Bavarian Academy.

Albanus, L. T., mit C. H. **Böse.** Materialien für Elektriker. *Halle*, 1783-90

Albany Institute, Transactions of the. 3 vols. 8vo. (*Vide* Trübner's Bibl. Guide of 1859, p. 22.) *Albany, New York*, 1831-55

Albert, C. L. De vi electrica in Amenorrhœa. 4to. *Gottingen*, 1764

† **Albinus,** F. B. Specimen inaugurale de Meteoris ignitis. 4to. 79 pp. *Lugduni Batavium*, 1740

† **Albrecht,** T. Ueber die Bestimmung von Längen-Differenzen mit Hülfe des elektrischen Telegraphen. 4to. 83 pp. *Leipzig*, 1869

† **Alden,** Timothy, Jun. Effects of Lightning on the House of Captain Manning in Portsmouth, New Hampshire; in a letter to Dr. Eliot. 4to. 2 pp. (*Mem. Amer. Acad.* iii. p. 93.) *Cambridge, U.S.*, 1809

† An account of some Electrical Phenomena. 4to. (*Mem. Amer. Acad.* iii. 333.) *Cambridge, U.S.*, 1815

Aldini, Giovanni. *Born April* 16, 1762, *at Bologna; died January* 16, 1834, *at Milan.*

† Memoria intorno all' Elettricità animale diretta all' Amoretti. 4to. 12 pp. (*Opuscoli Scelti*, xvii. 231.) *Milano*, 1794

† De animali electricitate Dissertationes duæ. 4to. 41 pp. *Bologna*, 1794

† Sull' elettricità animale. Lettera al Moscati. 4to. 10 pp. (*Opuscoli Scelti*, xix. 217.) *Vide* also *Ann. di Chim. di Brugnatelli*, xiii. 135. *Milano*, 1796

† Memoria intorno alcune elettriche esperienze al La Cépède. 8vo. 37 pp. (*Ann. di Chim. di Brugnatelli*, xiv. 174.) *Pavia*, 1797

† Lettera intorno all' Elettricità animale al Moscati. 8vo. 20 pp. (*Ann. di Chim. di Brugnatelli*, xiii. 135.) *Pavia*, 1797

† Memoria sulla elettricità animale di Galvani allo Spallanzani. Aggiunte alcune elettriche sperienze di Aldini. 4to. 105 pp. and plates. *Bologna*, 1797

† Memoria intorno ad alcune elettriche esperienze: al La Cépède. 4to. 20 pp. *Bologna*, 1797

† Transunto d'una Memoria intorno ad alcune elettriche sperienze del Cittadino Aldini, al La Cépède. 4to. 11 pp. (*Opuscoli Scelti*, xx. 73.) *Milano*, 1798

† Transunto delle sperienze sul galvanismo dell' Aldini. 4to. 12 pp. 1 plate. (*Opuscoli Scelti*, xxi. 412.) *Milano*, 1801

† Lettera al Vassalli sull' Elettricità. 8vo. 9 pp. (*Ann. di Chim. di Brugnatelli*, xix. 29.) *Pavia*, 1802

Aldini—*continued.*

† Saggio di Esperienze sul Galvanismo. 9vo. 80 pp. (*Ann. di Chim. di Brugnatelli*, xix. 158.) *Pavia*, 1802

† Saggio di Esperienze sul Galvanismo. 3 parts, 8vo. *Bologna*, 1802

† Expériences faites par Aldini. 4to. (*Bulletin des Sciences de la Soc. Phil.* No. lxviii.) *Paris*, 1803

† An account of the late improvements in Galvanism, with Appendix. Experiments on the body of a malefactor. 4to. 221 pp. 4 plates. *London*, 1803

† Galvanic experiments on February 18, 1803, in Dr. Pearson's lecture-room. 8vo. 2 pp. (*Phil. Mag.* xv. 93.) *London*, 1803

† Précis des expériences galvaniques faites récemment à Londres et à Calais. 8vo. 48 pp. *Paris*, 1803

† Essai théorique et expérimental sur le Galvanisme, avec une série d'experiences faites en présence des commissaires de l'Institut National de France, et en divers amphithéatres anatomiques de Londres. 4to. 398 pp. *Paris*, 1804

† Essai théorique et expérimental sur le Galvanisme. 2 vols. 8vo. *Paris*, 1804

Theoretisch praktische Versuche über den Galvanismus. 2 vols. 8vo. *Leipzig*, 1804

Lettre de Milan au Professor Sue. 8vo. (*Vide* Sue, Hist. iv. 279.) *Paris, about* 1805

† Sul potere del solo Arco animale nelle contrazioni muscolari. Esperienze galvaniche fatte dal G. Aldini. 4to. 4 pp. 1 pl. (*Mem. Soc. Ital.* xiv. 329.) *Verona*, 1809

† General views on the application of Galvanism to medical purposes. 8vo. 96 pp. *London*, 1819

De animalis electricæ theoriæ ortu atque incrementis. Dissertatio. (*Poggendorff*, i. 27, *gives no date, place, or other indications.*)

Gabinetto Aldini di fisica e chimica applicata. Col ritratto dell' Aldini, e con litografia rappresentante il Gabinetto. 8vo. 11 pp. (*Tipografia Regia.*) *Bologna*, 1863

† **Alemanni**, Pietro. Account of some experiments upon the Decomposition of Water and the production of Muriatic Acid by the electrical pile, made at the Literary Society of Milan by M. Pierre Alemanni, Apothecary to his Majesty, and Member of that Society. 8vo. 5 pp. (*Phil. Mag.* xxvii. 339.) *London*, 1807

Alexander, W. Plan for an instantaneous telegraphic communication betwixt Edinburgh and London by means of electric or voltaic currents transmitted through metallic conductors under ground. 1837

† Description of a Model for an Electro-magnetic Telegraph. fol. in 4to. 3 pp. *Edinburgh*, 1840

† Plan and description of the original Electro-magnetic Telegraph, with prefatory note to the Royal Commissioners. 1 plate. 8vo. 30 pp. *London and Edinburgh*, 1851

Alibert. Eloges historiques de Galvani. (*Mém. de la Soc. Méd. d'Emulation de Paris*, vol. iv.) *Paris, about* 1802

Eloges historiques de Galvani. "Versione Italiana,' printed anonymously, but attributed to Alfonso Bonfiole Malvezzi. (*Vide* Gherardi Rapport, p. 19.) *Bologna*, 1802

† Eloges de Spallanzani, de Galvani, de Roussel, et de Bichat, suivis d'un Discours. 8vo. *Paris*, 1806

Nouveaux éléments de thérapeutique. (*1st Edition*, 1804 *and* 1805.) 1817

† **Aliés**, P. F. Mémoire sur le mécanisme secret et sensible de l'électricité naturelle. 8vo. 112 pp. *Montpellier*, 1780

† **Aliprando**, L. Diatriba de Electricitate; habita in Gymnasio Regio Cremonensi, Anno 1777. 8vo. 92 pp. *Cremonæ*

† **Alison,** R. E. Narrative of an Excursion to the Summit of the Peak of Teneriffe on the 23d and 25th of February, 1829, including an Account of Phænomena attending a Waterspout at the Llanos de Gaspar, Teneriffe, in November 1826. 8vo. 8 pp. (*Phil. Mag.* viii. 23.) *London*, 1830

Allamand, Jean Nicolas Sébastien. (*Born September 18, 1713, at Lausanne; died March 2, 1787, at Leyden.*)

† An account of some experiments lately made in Holland upon the fragility of unannealed Glass Vessels, communicated to the President. (*Phil. Trans.* xliii. 505.) *London*, 1744-45

Wahrnehmung, &c. *The Hague*, 1755

Bericht wie ein Mädchen, das eine gewisse Art vom Schlage getroffen hatte, vermittelst der Electricität wieder zurechte gebracht worden ist:—nebst einigen Stücken zur Geschichte solcher Personen welche durch die Electricität geheilt worden sind durch T. D. Gaubius. 8vo. (*Abhand. der Gesellsch. zu Haarlem, Th.* i. 264.) *Haarlem*, 1757

On the Surinam Eel, with an account of many experiments, &c., by S'Gravesande. (*Trans. Haarlem Soc.*) *Haarlem*, 1757

Allan, Thos. Electro-motive power. *London*, 1852

Systems of Inland and Submarine Telegraphy. 8vo. *London*, 1858
Systems of National Telegraphic Communication. 8vo. *London*, 1859

† **Allard,** L. Electricité, Galvano-plastique. Tableau des effets de l'électricité et de ses applications à l'industrie. folio and 4to. *Paris*

† **Allen,** Z. Philosophy of the Mechanics of Nature, &c. 8vo. 797 pp. *New York*, 1852

Allen. (*Vide* Hare and Allen.)

Almanach des Lignes-Télégraphiques. 12mo. *Paris*, 1855

Almeida. (*Vide* D'Almeida.)

† **Alquier,** M. F. Sur la distribution de l'électricité sur deux sphères conductrices mises en présence. Présentée à la Faculté des Sciences de Paris, le 30 Mars. 4to. 19 pp. *Paris*, 1852

† **Althaus,** Freyhern von. Versuche über den Elektro-magnetismus; nebst einer kurzen Prüfung der Theorie des Hern Ampère vom Freyhern Althaus; mit einer Vorrede vom Hofrath Muncke. 8vo. 37 pp. *Heidelburg*, 1821

† **Althaus,** J. Treatise on Medical Electricity, theoretical and practical, and its use in the treatment of Paralysis, &c. 8vo. 352 pp. *London*, 1859

Die Electricität in der Medizin .8vo. (*Vide* Meyer, 1861, p. 43.) *Berlin*, 1860

† On Paralysis, Neuralgia, and other affections of the nervous system, and their successful treatment by Galvanisation and Faradisation. 3rd edition. sm. 8vo. 236 pp. *London*, 1864

† A treatise on Medical Electricity, theoretical and practical, and its use in the treatment of Paralysis, Neuralgia, and other diseases, &c. 2nd edition. 8vo. 676 pp. *London*, 1870

† On the medical use of Galvanization and Faradisation. New edition. 8vo. 69pp. *London*, 1870

† **Ambrosoli,** G. Prime nozioni di fisica esposte. 8vo. 1189 pp. *Milano*, 1854-56

Ambschel, A. von. Translation in German of Herbert Dissertatio de vi electrica aquæ. (*Vide* Herbert, 1778.) 1778

American Academy of Arts and Sciences, Memoirs of the. Old series 4 vols. 4to. *Boston*, 1785-1818

New series. 5 vols. 4to. (*From Trübner's Bibl. Guide*, 1859.) *Boston*, 1833-55

† Proceedings of the, for 1846. Part of vols. i. to iv. 8vo. *Boston*, 1847

American Association for the Advancement of Science. Proceedings of, 8vo. (*From Trübner's Bibl. Guide*, 1859, p. 19.) 1849-56

American Journal of Science. Conducted by Benjamin Silliman, B. Silliman, junior, and Dana. Published at New York and New Haven, U.S. (*From Trübner's Bibl. Guide*, 1859, pp. 489-90.) 1818-56

American National Institution. Bulletins of the proceedings of the. The 2nd Bulletin, 1842, contains Rogers's Explanation of his Land Telegraph, p. 154. 8vo. *Washington*, 1841-46

† **American Philosophical Society.** Proceedings of, contained in ten incomplete volumes, and extending over the period of 1838-66. No. 27 has an account of the 100th Anniversary. 8vo. *Philadelphia*

American Polytechnic Journal. (*From Kuhn of* 1866, p. 1091.)

American Annual of Scientific Discovery.

American, Scientific. (*Vide* Scientific American.)

Amici, G. B. Osservazioni sulla circolazione del succhio della chara. (*Pogg.* i. 35 *gives a French version, and Ann. Chim. Phys.* xiii. 1320.) *Modena*, 1820

† **Ammersin,** Wendelino. Brevis relatio de electricitate propria lignorum. 12mo. 27 pp. *Lucerne*, 1753 *or* 1754

Kurze Nachricht von der eigenthumlichen Electricität des Holzes; aus dem Latin. 8vo. (*Vide* Jalabert, 1771, *which contains this translation as an appendix.*) *Basel*, 1771

Amontons, G. On his Telegraph. 4to. (*In his Biography in the Mém. de Paris*, 1705.) *Paris*, 1705

Amoretti, Carlo. *Born March* 18, 1741, *at Oneglia, near Genoa; died March* 25, 1816, *at Milan.*)

† Lettera al Soave su alcune sperienze elettriche. 4to. 5 pp. (*Opus. Scelti*, xix. 233.) *Milano*, 1793

† Lettera al Fortis, su varj Individui che hanno la facoltà di sentire le sorgenti, le miniere, &c. 4to. 17 pp. *Milano*, 1797

† Rabdomanzia, Lettera 1a. 4to. 84 pp. (*See below*, 1801-4.) *Milano*, 1798

† Ragguaglio ed analisi delle pietre cadute dal cielo, o almeno reputate tali. 4to. *Milano*, 1803

† Breve storia del Galvanismo. 4to. 26 pp. (*Opus. Scelti*, xxii. 357.) *Milano*, 1803

† Altre notizie sul Galvanismo o Voltaismo medico. 4to. 7 pp. (*Opus. Scelti*, xxii. 84.) *Milano*, 1803

† Sugli Areoliti ossia pietre caduto dall' atmosfera. 4to. 4 pp. (*Nuova Scelta d' Opuscoli*, i. 48.) *Milano*, 1804

† Rabdomanzia, Lettere 2a, 3a, 4a, 5a, 6a. 4to. (*Opus. Scelti*, xxi. 73, 170, 393.) *Milano*, 1801-4

† Nuova Scelta d'Opuscoli interessanti sulle scienze e sulle arti tratti dagli Atti delle Accademie, &c., dalle opere Inglesi, Tedesche, &c. 2 vols. tom. i. 1804, ii. 1807, 4to. *Milano*, 1804 *and* 1807

† (1.) Ragguaglio d'un Aerolite in Siberia. Translated from Gilbert's Annalen, 1807.

† (2.) Nota dell' Editore su Altri Aeroliti. 4to. 8 pp. (*Nuova Scelta d' Opus.* ii. 165 and 166.) *Milano*, 1807

† Aeroliti caduti nel Dipartimento del Garda in Milano. 4to. 4 pp. (*Nuova Scelta d' Opus.* ii. 63.) *Milano*, 1807

† Sui Turbini o Trombe di Terra osservati al Nord di Milano il giorno 6 Giugno, 1808. 4to. 8 pp. (*Nuova Scelta d' Opus.* ii. 302.) *Milano*, 1807

Elogio dell' Amoretti. 4to. (*Ital. Soc. Mem.* xviii.) *Modena*, 1820

Viaggio ai tre laghi colla vita dell' autore del G. Labus. 12mo. (*From Libri's Sale Cat.* 469.) *Milano*, 1824

† **Amoretti,** Campi, Fromond e Soave. Scelta di Opuscoli interessanti tradotti da varie lingue. 36 vols. 12mo. (*Collated for Electricity, &c., and the articles on these subjects obtained by Sir Francis Ronalds in* 1859.) *Milano*, 1775-77

Sequel to the Scelta di Opuscoli. 22 vols. 4to. *Milan*, 1801-3

Ampère, André Marie. *Born Jan.* 22, 1775, *at Lyons; died June* 10, 1836, *at Marseilles.*

† Account of his discoveries on the attraction and repulsion of two conductors, or portions of the same conductor joining the two extremities of the voltaic pile. 8vo. 2pp. (*Phil. Mag.* lvi. 308.) *London*, 1820

† Analyse des Mémoires lus par M. Ampère à l'Académie les 18 et 25 Septembre, les 9 et 13 Octobre, 1820. Suite de l'Analyse. Mémoire lu le 6 Nov. 1820. 8vo. (*Ann. de Phy. de Bruxelles*, vii.) *Paris*

Electro-magnetic Telegraph explained in a Memoir presented to the Academy, October 2, 1820. 8vo. (*An. de Phy. et. Chim.* xv. 72.) (*Vide* also *Anon. Electricity*, 1821.) *Paris*, 1820

† Mémoires sur l'Action mutuelle de deux courans électriques, sur celle qui existe entre un courant électrique et un aimant ou le globe terrestre, et celle de deux aimants l'un sur l'autre. 8vo. 68 and 31 pp. *Paris*, 1820-22

† Recueil d'Observations Electro-dynamiques contenant divers Mémoires, &c., relatifs à l'action mutuelle de deux courants électriques, &c. 8vo. (Scarce; a new edition proposed.) *Paris*, 1822

† Extrait d'une lettre au Professeur De la Rive sur des expériences electro-magnétiques. 8 pp. 1 plate. 8vo. (*Bibl. Univers.* xx.) *Paris*, 1822

† Exposé méthodique des phénomènes electro-dynamiques et des lois de ces phénomènes. 8vo. 28 pp. *Paris*, 1823

† Précis de la Théorie des phénomènes electro-dynamiques pour servir de supplément à son Recueil d'Observations électro-dynamiques et au Manuel d'électricité-dynamique de M. Demonferand. 8vo. 67 pp. 1 plate. *Paris*, 1824

† Description d'un Appareil électro-dynamique. 1st edition. 8vo. 24 pp. *Paris*, 1824

† Mémoire sur une nouvelle expérience Electro-dynamique, suivi d'une lettre à Gherardi. 8vo. 48 pp. (*Acad. de Paris*, 12 *Sept.*, 1825. *Ann. de Chim.*, 1825.) *Paris*, 1825

† Précis d'un Mémoire sur l'Electro-dynamique. Extrait de la correspondance mathématique et physique des Pays Bas. 8vo. *Gand*, 1825

† Précis d'un Mémoire sur l'Electro-dynamique. Lu à l'Acad. R. des Sciences, 21 Novembre, 1825. 8vo. 15 pp. 1 plate. *Gand, n. d.*

Sur les piles sèches de M. Zamboni. 8vo. (*Ann. de Chim. et Phys.* xxix.) *Paris*, 1825

Description d'un Appareil électro-dynamique. 2nd edition. 8vo. (Reprint.) *Paris*, 1826

† Théorie des Phénomènes électro-dynamiques uniquement déduite de l'expérience. 4to. 226 pp. 2 plates. *Paris*, 1826

Mémoire sur l'action mutuelle d'un Conducteur voltaïque et d'un Aimant. 8vo. 88 pp. *Paris*, 1826

† Mémoire sur l'action mutuelle d'un Conducteur voltaïque et d'un Aimant. 4to. 88 pp. 3 plates. *Bruxelles*, 1827

† Note sur l'action mutuelle d'un Aimant et d'un Conducteur voltaïque. 8vo. 29 pp. (*Ext. Ann. de Chim.* 1828.) *Paris*, 1828

† Notice sur M. Ampère (par E. Littré). 8vo. 96 pp. *Paris*, 1843

† **Ampère et Babinet.** Darstellung der neuen Entdeckungen über die Elektricität und den Magnetismus aus dem Französischen. 8vo. *Leipzig*, 1822

Darstellung der neuesten Entdeckungen über Elektricität und Magnetismus. 8vo. 118 pp. 2 plates. *Leipzig*, 1822

Ampère et Babinet—*continued.*

† Exposé des nouvelles découvertes sur l'Electricité et Magnétisme de Oersted, Arago, Ampère, Davy, Biot, Erman, Schweiger, De la Rive, &c. (*Seyffer, p. 377, mentions a German translation at Leipsig, 1822. Ouerard says "imprimé d'abord dans le Supplément de la Chimie de Thompson."*) 8vo. *Paris*, 1822

Vide also Hachette and Ampère.

Amsler, Jacob. *Born November* 16, 1823, *at Stalden bei Brugg.*

† Zur Theorie der Vertheilung des Magnetismus im weichen Eisen. 4to. 26 pp. *Neuchatel*, 1849

Amyot. Note historique sur le Télégraphe electrique. 4to. (*Comptes Rendus*, vii. 80.) *Paris*, 1838

Sur un procédé de Correspondance télégraphique au moyen de l'Electricité. 4to. (*Comptes Rendus* v. 909, vii. 1162, xxvii. 271-293.) *Paris*, 1838 and 1848

Andern. (*Vide* Pfaff and Andern.)

† **Anderson**, Sir James. Existing and projected Telegraphic Routes to India considered. 8vo. 31 pp. *London*, 1868

Anderson, Johann. *Born March* 14, 1674, *at Hamburg; died March* 3, 1743, *at Hamburg.*

Nachricht von Island, Grönland und der Strasse Davis, &c. 8vo. *Hamburg*, 1746

Andria, Niccolo. *Born September* 10, 1748, *at Massafra, prov. Otranto; died December* 9, 1814, *at Naples.*

† Analyse de la série des circonstances particulières qui ont lieu dans les êtres organisés, et qui décident de leur existence. Du Siége et de la Faculté du Galvanisme et de la cause de l'excitabilité, traduite par A. Pitaro. 8vo. *Paris*, 1805

Andrieux. Mémoire sur l'Application méthodique du Galvanisme au traitement des Maladies. *Paris*, 1824

† De l'emploi du Galvanisme dans le traitement de la Gastrite chronique. Mémoire lu à l'Académie de Médecine en Février, 1833. 8vo. 16 pp. *Paris*, 1835

Andry et Thouret. Observations et Recherches sur l'usage de l'Aimant en médecine, ou Mémoire sur le Magnétisme médicinal. 8vo. (*Reuss. Repert.* xii. 18.) *Paris*, 1779

† Rapport sur les Aimants présentés par M. l'Abbé le Noble. (*Extrait des Régistres de la Société Royale de Médecine. Lu Mardi*, 1 *Avril*, 1783.) 4to. 1783

Anglade, J. G. Essai sur le Galvanisme appliqué à la Pathologie. 4to. (*Vide* Suc Hist. iii. 73.) *Montpellier*, 1803

Angus, Wm. Magnetism, its history. 18mo. *London*, 1841

Annalen der Chemie, &c. Herausg. von Liebig, Wöhler, &c. A complete set. 8vo. vols. 1 to 116. *Heidelb.* 1832-1860

Annalen der Telegraphie. *Vide* Brix.

Annales de Chimie, ou Recueil de Mémoires concernant la Chimie, &c., par Guyton-Morveau, Lavoisier, Monge, Berthollet, Seguin, Vauquelin, de Fourcroy, de Dietrich, Hassenfratz, et Adet; C. A. Prieur, Chaptal, Deyeux, Bouillon-Lagrange, Collet-Descollis, A. Laugier, Gay-Lussac, Thenard, &c. 8vo. 96 vols. *Paris*, 1789-1815

† **Annales de l'Electricité Médicale.** Revue internationale de l'Electricité, de l'Electro-puncture, du Galvanisme, et du Magnétisme, appliquées à la Médecine et la Chirurgie; publiée par une Réunion de Médecins, sous la direction de Van Holsbeeck. 8vo. vols. i. iii. iv. and v. *Paris, Londres, et Bruxelles*, 1861

Annales des Mines. 8vo. *Paris*, 1816

Annales générales des Sciences Physiques. Par Bory de Saint Vincent, Drapiez, et Van Mons. 8vo. (*Cat. Roy. Soc.* 1839, p. 636.) *Bruxelles*, 1819-21

Annales Télégraphiques. Publiées par un Comité de l'Administration des Lignes Télégraphiques. Plates. 8vo. *Paris*, 1858

† **Annali di Fisica, Chimica, &c.** *Vide* Majocchi. Fol. 28 vols. 1841-47

Annali delle Scienze del Regno Lombardo Veneto. 4to. (*Vide* Fusinieri Editor.) *Vicenza, Padua, &c.* 1831-45

Annali di Scienze Matematiche e Fisiche. 8vo. 8 vols. Plates. *Roma*, 1850-7

Annals of Philosophy, or Magazine of Chemistry and Mineralogy, by T. Thomson. 8vo. vols. i. to xvi. *London*, 1813-20

New Series, by R. Phillips. 8vo. vols. i. to x. *London*, 1821-26

Annuaire des Lignes Télégraphiques. 8vo. *Paris*, 1857

Annuaire des Sociétés savantes de la France et de l'Etranger. 8vo. *Paris*, 1846

Annuario Bibliografico Italiano. Pubblicato per cura del Ministero della Istruzione Pubblica. Anno I. 1863. 8vo. *Torino e Firenze*, 1866

Anonymous. (See end of Letter A, p. 16.)

Anselmo, Giorgio. Effets du Galvanisme sur des animaux noyés. (Continuation promised but not given.) 8vo. 18 pp. *Turin*, 1803

† Dello svolgimento dell' Elettricità nell' Economia animale e vegetale. Discorso accademico. 8vo. 42 pp. *Torino*

Anstruther, Sir Alexander. *Born in Fifeshire, Scotland; died July* 1819 *at Isle de France.*

Essay on the nature, &c. of Heat, Electricity, and Light. 8vo. *London*, 1800

Antheaulme. Traité sur les Aimans artificiels. 4to. *Petersburg*, 1760

Mémoire sur les Aimants artificiels, qui a remporté le prix de l'Académie de St. Petersbourg. 12mo. *Paris*, 1761

Antinori. Notizie istoriche su due Saggi di Naturali esperienze fatte nell' Accademia del Cimento. *Firenze*, 1841

Patologia fisico-chimico-meccanico-animale. 16mo. 5 vols. *Firenze, n. d.*
(*Vide* also Nobili and Antinori.)

Antonio, N. Bibliotheca Hispana Vetus. 2 vols. fol. *Matriti*, 1788

Bibliotheca Hispana Nova. 2 vols. fol. *Matriti*, 1783-88

Apelt, E. F. Die Theorie der Induction. 8vo. 204 pp. *Leipzig*, 1854

Arago, Dominique François Jean. *Born February*, 26, 1786, *at Estagel, near Perpignan; died October* 2, 1853, *at Paris.*

Aimantation par l'action de l'Electricité ordinaire. (*Le Moniteur* 10 *Nov.* 1820.) *Paris*, 1820

(Découvert) que le Courant voltaique développe fortement la vertu magnétique dans des Lames de fer ou d'acier qui d'abord en etaient totalement privées. 8vo. (*An. de Chim. et Phys.* xv. 94.) *Paris*, 1820

† On Earthquakes and Magnetism. On 19th February, 1822, agitation of a needle caused, he thought, by an Earthquake. 8vo. (Account transmitted to the French Academy.) (*Phil. Mag.* lix. 233.) *London*, 1822

Sur les Déviations que les Métaux en mouvement font éprouver á l'aiguille aimantée. 4to. (*Ann. de Chim. et Phys.* xxxiii.) *Paris*, 1825

† Notices scientifiques. Sur la Grêle et des Paragrêles, &c. 12mo. *Paris*, 1827

† Notices scientifiques. Notice historique sur la Pile Voltaïque, &c. 12mo. *Paris*, 1833

† Notices scientifiques. Sur le Tonnerre. 12mo. 410 pp. *Paris*, 1837

† Quelle est la durée d'un éclair de la première ou de la seconde classe? 12mo. 13 pp. *Paris*, 1837

Arago—*continued.*

Comment on peut constater l'avance ou le retard de deux phénomènes lumineux. (*From Moigno, who gives no indication as to date, place, &c. The quotation has reference to electrical sparks, &c.*)

Sämmtliche Werke mit Einleitung von Humboldt, herausgegeben von Hankel, Band iv. enthaltend über die Gewitter, Electricität, Magnetismus, und Nordlicht. 8vo. *Leipsig*, 1854

† Œuvres de François Arago publiées d'après son ordre sous la direction de M. J. A. Barral. Notices Scientifiques, Tome premier. 8vo. *Paris*, 1854

Principe des Télégraphes électriques. 8vo. *Paris*, 1854

† Meteorological Essays, with an Introduction by Humboldt, translated by Sabine. 8vo. *London*, 1855

† Œuvres publiées par Barral. Tome ii. des Notices Scientifiques. 8vo. *Paris*, 1855

Narrative of Freycinet's Voyage. 4to. (*Phil. Mag.* vol. lxi. p. 134.) 1823

Notice biographique de Volta. (*Vide* Volta.)

(*Vide* also Faria and Arago.)

† **Aratos.** Sternerscheinungen und Wetterzeichen, griech, über: und Erklärungen Voss. *Heidelburg*, 1824

Arbas. (*Vide* D'Arbas.)

† **Arcangeli,** Carlo. Sul magnetismo, sull' elettricismo, e sui raggi solari. Tre Lezioni. 8vo. *Firenze*, 1867

Archereau, H. A. Régulateur de la Lumière électrique. (*Du Moncel*, p. 217, *describes it (with figure), but gives no date, place, &c.*)

Archives des Découvertes et des Inventions nouvelles faites dans les sciences, les arts, &c., pendant 1808-30. 8vo. 23 vols. (*Cat. Roy. Soc.* 1839, 636.) *Paris*, 1809-31

Archives de l'Electricité. De la Rive, Editeur. (*Belonging to the Bibliothèque published at Geneva.*) (*Vide* La Rive, De)

† **Archives des Sciences Physiques.** (*Belonging to the Bibliothèque published at Geneva.*)

Archives für Wissenschaftliche Kunde von Russland. Herausgegeben von A. Erdman. 8vo. *Berlin*, 1841

Arden. (*Vide* Priestly, Versuche über Naturlehre.)

† **Arella,** Carnevale Antonio. Storia dell' Elettricità. 8vo. 2 vols. *Alessandria*, 1839

† **Arenstein,** J. Austria at the National Exhibition of 1862. 4to. *Vienna*, 1862

† **Argelander,** F. W. A. Verzeichniss von Nordlichtern beobachtet auf den Sternwarten zu Abo und Helsingfors in den Jahren 1823-37. 4to. 49 pp. *Helsingfors*, 1866

Armengaud. Génie industriel. (*From Kuhn*, 1866, *p.* 1360.)

Arnaud. (*Vide* Porna (or Poma) and Arnaud.)

Arnault. L'Institut. Journal des Académies et Sociétés scientifiques. (*Venet. Lomb. Inst.* v. 54.) *Paris*, 1835

† **Arndtsen,** Adam. Magnetiske undersögelser, anstillede med W. Weber's Diamagnetometer. 4to. 43 pp. 2 plates. *Christiania*, 1858

† Nickelens Ledningsmodstand. 4to. *Christiania*, 1858

Arnim, Ludvig Achim Von. *Born Jan.* 26, 1781, *at Berlin; died Jan.* 21, 1831, *at Wiepersdorff.*

† Versuch einer Theorie der electrischen Erscheinungen. 8vo. 146 pp. 1 plate. *Halle*, 1799

Arnott, Neil. Elements of Physics or Natural Philosophy, written for General Use in Non-technical Language. Comprising the new chapters on Electricity and Astronomy, with an outline of Popular Mathematics. The work complete in two Parts. (*The 5th Edition is dated* 1833.) *London*

† **Arnoux,** E. La Lettre Electrique. Nouveau service télégraphique. Le télégraphe électrique rendu populaire. 8vo. 106 pp. *Paris,* 1867

† **Arregoni.** Jasi meccanica, o trattato dei rimedii naturali meccanici. 8vo. 2 vols. *Lodi,* 1775.

Arrest. (*Vide* D'Arrest.)

Arrighetti, Niccolò. *Born November* 11, 1586, *at Florence; died June* 1, 1639, *at Florence.*

Epitome della teoria elettrica (in Latin.) *Sienna,* 1756

† **Arrot,** A. R. On some new cases of Voltaic Action, and on the construction of a Battery without the use of oxidizable metals. 8vo. 8 pp. *London,* 1842

Arschereau. (*Vide* Lemolt and Arschereau.)

Aschlund, A. Om Magnetens Forhold til seine Poler. *Kiobnhafn,* 1830

† **Asclepi,** Giuseppe. *Born April* 16, 1706, *at Macerata; died July* 21, 1776, *at Rome.*

† Osservazioni intorno alla Declinazione della Calamita fatte in Roma. 4to. 19 pp. (*Atti dell' Accad. di Siena,* ii. 107.) *Sienna,* 1763

Ash, Dr. Edward. On the action of Metals in contact with each other upon Water. Letter to Humboldt April 10, 1796. (This is a German Letter in Humboldt's Versuche, p. 472.) 1796

Asiatic Researches; or Transactions of the Society instituted in Bengal for inquiring into the History and Antiquities, the Arts, Sciences, and Literature of Asia. 4to. 12 vols. plates. *London,* 1799-1812. *Calcutta,* 1816

Asiatic Society, Transactions of the. 4to. *London,* 1827

Assalini, Ritter. Kurze Erläuterung des Zambonischen immerwährenden Elektromotors. *München,* 1816

Asson. Rapporto della commissione che ha fatto gli esperimenti sull' Elettropuntura, come mezzo congelante il sangue nelle arterie e sull' obliterazione delle vase (*sic.*) (*Gazette des Hôpitaux, No.* 48.) 1847

Astier, Charles Benoit. *Born March* 6, 1771, *at Mont-Dauphin, dep. Hautes Alpes.*

Notice sur les Paragrèles à pointes; projet de paragrèles à flammes et expériences comparatives du pouvoir électrique des flammes et des pointes. 8vo. *Toulouse,* 1829

Considérations sur les fonctions physiologiques des épines, et sur le rapport qu'elles paraissent avoir avec les météores électriques. (*Annales de la Société linnéenne de Paris, November.*) 1825

Astronomical Expedition. The United States Naval Astronomical Expedition. Vol. vi. Magnetical and Meteorological Observations. Many plates and maps. 4 vols. 8vo. (Vols. iv. and v. not published.) *Washington,* 1855-56

Astronomical Society. Memoirs. 4to. (*Cat. Roy. Soc.* 1839.) *London,* 1822

† **Atkinson,** H. On Hypotheses proposed for explaining the origin of Meteoric Stones; with remarks on Mr. Murray's letter on Aërolites inserted in the Philosophical Magazine. 8vo. 7 pp. (*Phil. Mag.* liv. 336.) *London,* 1819

Atkinson, E. (*Vide* Ganot, A.)

† **Atlantic Telegraph Company.** The Atlantic Telegraph. A History of preliminary experimental Proceedings, and a descriptive account of the undertaking; published by order of the Directors of the Company. 8vo. 69 pp. 2 plates. *London, July,* 1857

† Chart of Soundings and Section of the Bottom of the Atlantic Ocean from Valentia, Ireland, to St. John's, Newfoundland. *London,* 1858

† **Aubé,** Ph. A. De l'Electricité soit de l'Ame universelle considerée dans ses forces motrices. 8vo. 56 pp. *Elbeuf,* 1852

Aubert. Elektrometische Flasche. 4to. (*Observations sur la Phys. Delametherie.*) *Paris,* 1789

His Elektrophorus. (*Journ. de l'Hist. Nat.*) 1787

Aubuisson. (*Vide* D'Aubuisson.)

"Auditor." (*Vide* Anon. Elect. 1808.)

Augustin, Friedrich Ludwig. *Born June 3, 1776, at Berlin.*

† Vom Galvanismus und dessen medicinischer Anwendung. 8vo. 64 pp. 1 plate. *Berlin*, 1801

† Versuch einer Geschichte der galvanischen Elektricität und ihrer medicinischen Anwendung. 8vo. 284 pp. 1 plate. *Berlin*, 1803

† **Aurifabrum,** A. Succini historia. Ein kurtzer grundlicher Berichte woher der Agtstein oder Börnstein ursprunglich komme, das er kein Baumharts sey sonder ein geschlecht des Bergwachs. Und wie man ihnen manigfaltiglichi n artzneien möge gebrauchen. Durch Andream Aurifabrum. Vratislaviensem, Medicum. Sm. 4to. (*Scarce, curious, and esteemed.*) *Königsberg*, 1551

Auriol, L. J. d'. Manuel de la Correspondance secrète postale ou télégraphique. Guide pour composer et pour traduire les dépêches en chiffres. 8vo. *Paris*, 1867

† **Austin** and **Clark.** Letter from Austin to Dr. Monro, junior, on the effect of Electricity in removing obstructions of the Menses. Remarks on the foregoing letter by the late Dr. D. Clark. Edinburgh, September 6, 1764. (*Essays and Observations*, iii. 116.) *Edinburgh*, 1764

Ausout, A. Observation made in Rome concerning the declination of the Magnet. (*Phil. Trans.*, &c., 1670, p. 1184.) 4to. *London*, 1670

Avanzamenti della Medicina e Fisica. Opera periodica che serve di seguito al Giornale Fisico Medico di L. Brugnatelli. 8vo. *Pavia*, 1796

† **Avelloni,** D. Lettera in cui si dimostra non esser necessario ricorrere al fuoco elettrico per ispiegare la formazione e gli effetti delle Meteore. 12mo. *Venezia*, 1760

Avezac. (*Vide* D'Avezac.)

† **Avogadro,** A. Mémoire sur la construction d'un Voltimètre multiplicateur et sur son application. 4to. 40 pp. (*Mem. di Torino*, xxvii. 43.) *Torino*, 1823

† Mémoire sur les volumes atomiques et sur leur relation avec le rang que les corps occupent dans la série électro-chimique. 4to. 65 pp. (*Mem. di Torino*, serie 2, tom. viii. p. 129.) *Turin*, 1846

† Saggio di teoria matematica della Distribuzione dell' Elettricità sulla superficie dei corpi conduttori, &c. 4to. 29 pp. 1 plate. (*Ital. Soc. Mem.* xxiii. 156.) *Modena*, 1844

(*Vide* also Botto et Avogadro.)

† **Ayrton,** W. E. On a quantitative Method of testing a "Telegraphic Earth." (*Journal of the Asiatic Society of Bengal.*) 1871

Azais, Pierre Hyacinthe. *Born March 1, 1766, at Correze.*

Théorie générale de l'Electricité, du Galvanisme, et du Magnétisme. 8vo. (*Phil. Mag.* xxviii. 182.) *London*, 1807

(*Vide* also Bapst and Azais.)

Azuni, D. A. Sull' Origine della Bussola Nautica. 8vo. *Venezia*, 1797

† Dissertation sur l'origine de la Boussole. 8vo. 133 pp. *Paris*, 1805

† Dissertation sur l'origine de la Boussole. 2nd edit. 8vo. 269 pp. *Paris*, 1809

Azzalini. Kurze Erläuterung des Zambonischen Electromotors. 8vo. *München*, 1814

Kurze Erläuterung des Zambonischen immerwährenden Elektromotors. 4to. *München*, 1816

ANONYMOUS.

Atlantic Telegraph.

† Origin and Progress of the Oceanic Electric Telegraph. 8vo. *London*, 1858

† The Atlantic Telegraph. Its History from the commencement of the undertaking, in 1854, to the sailing of the "Great Eastern" in 1866. 8vo. 16 pp. *London*, 1866

Atlantic Telegraph, a history of experimental proceedings. 8vo. 1867

The Atlantic Telegraph. An authentic history of that great work; with Biographies, Maps, Engravings, Portraits, &c. Dedicated to C. W. Field. *New York*

Electricity, Electro-magnetism, Galvanism, &c.

Aufrichtige und unpartheyische Gedanken von der Electricität, worinnen der Herr Professor Bose in Wittenberg, gegen das so harte Urthiel der Hamburg unpartheyischen Correspondenz im 153 St. dieses Jahres vertheidiget wird. 4to. *Wittenberg*, 1744

† Dissertation sur la cause de l'électricité des Corps et des Phénomènes qui en dépendent. Sujet proposé par l'Académie Royale des Sciences de Berlin pour le prix qui doit être distribué le 31 Mai, 1745. (*It is the Fourth Dissertation.*) 4to. 45 pp. *Berlin*, 1745

† Zweite Abhandlung von der Natur der Electricität, welche bei der Königlichen Akademie der Wissenschaften in Berlin eingesendet und des Drucks würdig geschätzt worden. 4to. 192 pp. *Berlin*, 1745

† Dritte Abhandlung von den Eigenschaften, Wirkungen und Ursachen der Electricität, welche bei der Königlichen Akademie der Wissenschaften in Berlin eingesendet und wegen ihrer Ausarbeitung des Drucks würdig geschätz worden. 4to. 104 pp. (*Waitz's Collection of 4 Essays.*) *Berlin*, 1745

(F. W.) Schreiben an die Akad. zu Berlin, die Untersuchung von der Electricität, &c. betreffend. 4to. (*Cat. Royal Society.*) 1745

† Dissertation sur la cause de l'Electricité des Corps et des phénomènes qui en dépendent. Sujet proposé par l'Academie Royale des Sciences de Berlin pour le prix, le 31 Mai, 1745. 4to. 45 pp. (*Waits's Collection of 4 Essays.*) *Berlin*, 17—(?)

† A Philosophical Enquiry into the properties of Electricity. Letter to a friend. 8vo. 32 pp. *London*, 1746

Congetture fisiche intorno ai fenomeni della macchina elettrica. 8vo. *Roma*, 1746

† Dell' Elettricismo, ossia delle forze elettriche dei Corpi. Aggiuntevi due Dissertazioni. 8vo. 391 pp. plates. (See also 1847.) *Venezia*, 1746

Mémoire sur l'Electricité. 37 pp. (*Vide* Boullanger.) *Paris*, 1746

Explication physique des effets de l'électricité * * * Professeur perpétuel de philosophie de l'Université d'Avignon. 12mo. 1 plate. 48 pp. *Avignon*, 1747

† Dell' elettricismo, ossia delle forze elettriche de' Corpi . . . aggiuntevi due Dissertazioni . . . 8vo. 364 pp. 1 plate. *Napoli*, 1747

† Recueil de Traités sur l'Electricité, traduits de l'Allemand et de l'Anglais. In 3 parts. 12mo.

1er Partie. Winckler. Essai sur la nature, les effets, et les causes de l'électricité, avec une description de deux nouvelles machines, traduit de l'Allemand.

2me Partie. Watson. Expériences et Observations pour servir à l'explication de la nature et des propriétés de l'électricité, proposées en trois lettres à la Société Royale de Londres. Traduits de l'Anglois d'après la 2me edition.

And Suites des expériences et observations, addressées a la Société Royale de Londres.

3me Partie. Freke. Essai sur la cause de l'électricité. 2me édition, avec un supplément. Traduit de l'Anglois.

Electricity, &c.—*continued.*

Martin. Essai sur l'Electricité. Traduit de l'Anglois.

Each part is paged separately, and each work has a separate title-page. They are the works, printed separately, but united in this volume, under the above general title. At the end of the volume is the "Approbation" enumerating them (as above.) *Paris*, 1748

† Cause et Mécanique de l'Electricité. 12mo. 214 pp. *Paris*, 1749

† Lettre à l'Abbé Nollet sur l'Electricité. 8vo. (*Vide* Boullanger.) *Londres*, 1749

† Lettera al Beccaria intorno al primo capo del suo Elettricismo artificiale. (Nollet?) Author's date is 8 Marzo, 1753. 1753

Electricitas. *Nuremberg*, 1758

Experiments on the instantaneous transmission of electric power through more than four Italian miles of wire. By "Filosofi presso il Monteiro." (*The Pyrotechnia*, vi. 944.) 1771 (?)

Lettre d'un Abbé * * * sur l'Electrophore. (*Vide* Jaquet.) *Vienne*, 1775

Electrical means of spreading information through immeasurable space, almost instantaneously. (*Le Mercure de France, Juin*, 1782, *No.* 23.) 1782

† (N***, l'Abbé.) Principes d'Electricité. Ouvrage traduit de l'Anglois par l'Abbe N*** auquel on a joint certaines notes interessantes et propres à confirmer les principes nouveaux de l'illustre Auteur (*i. e.* Lord Mahon). 8vo. 250 pp. 6 plates. (*Nollet died* in 1770). (*Vide* Lord Mahon, 1780.) *London*, 1781

† Dell' efficacità dei conduttori elettrici, Dubbj proposti ai Fisici moderni. 8vo. 1784

Materialien für Elektriker. 1^er^ Lieferung. 8vo. (*Poggendorff*, i. 22, *says by Albanus.* (*Vide* Albanus.) *Halle*, 1788

Materialien für Elektriker. 2^e^ Lieferung. *Halle*, 1790

(C. L.) Briefe über Electricität. 8vo. 1789

Revision der vorzüglichen Schwierigkeiten in der Lehre von der Elektricität. 8vo. (*Vide* Heinsius, iii. 378.) *Heidelberg*, 1789

† Intorno all' influenza dell' elettricità nel moto muscolare, &c. 8vo. 8 plates. (*Gior. Fis. Med.* i. 280. *Repetition of Galvani's experiments by Volta, Rezia, and Brugnatelli.*) *Pavia*, 1792

Lettre d'un ami au comte Prospero Balbo. (Sur les expériences de Galvani.) *Bibliotèque de Turin*, i. 261, 1792, *Mars.*) *Turin*, 1792

† Ragguaglio delle sperienze del Galvani sull' elettricità animale, estratto da una lettera al Conte Balbo. 8vo. 16 pp. (*Gior. Fisico-Medico di Brugnatelli*, ii. 94 *and* 97.) *Pavia*, 1792

Expériences galvaniques verifiées jusqu'à présent à l'école de Médecine au moyen de l'appareil imaginé par le Dr. Volta. 4to. (*Soc. Philomath, An.* 4, ii. 165.) *Paris*, 1796

† Esperienze galvaniche verificate alla Scuola di Medicina. 8vo. (*In Annali di Chimica di Brugnatelli*, xviii. 175. *Also in Magazin Enciolop.* No. 16.) *Pavia*, 1806

Introduzione all' Elettricità; che contiene le nozioni esatte del fuoco elementare colla loro applicazione. 8vo. (*Opusc. Soclti* (*in* 4to.), xii. 23.) *Madrid*

† On the Electric Fluid. (*Phil. Mag.* xvi. 173.) *London*, 1803

† Galvanic experiments made by Carpue on the body of Michael Carney, from Notes taken by an eminent Physician. 8vo. 3 pp. (*Phil. Mag.* xviii. 90.) *London*, 1804

† (B. E.) On Galvanism, by a Correspondent. 8vo. 3 pp. (*Phil. Mag.* xviii. 170.) *London*, 1804

† Preliminary matter on Electricity, &c., in the volumes printed in 1805, 1809, 1816, and 1827, and in vol. i., printed in 1839, of the Second Series of the Turin Memoirs, (in all five articles). 4to. (Vassalli and others?) *Torino*, 1805-39

† A new Electrical Phenomenon. 8vo. 1 p. (*Phil. Mag.* xxi. 162.) *London*, 1805

Electricity, &c.—*continued.*

† A new Fact in Galvanism. Communicated by a Correspondent. 8vo. 2 pp. (*Phil. Mag.* xxiv. 203.) *London*, 1806

† (R. F.) Sulla teoria del circuito galvanico. 8vo. 47 pp. (*Arago's copy.*) *Torino e Pisa, n. d.*

† On Electricity. Adhesion of two cylindrical conductors after a discharge, &c. (*Phil. Mag.* xxv. 72.) *London*, 1806

† (C. R.) On the partial fusion of Metals by the Electric Discharge. By a Correspondent. 3 pp. (*Phil. Mag.* xxiv. 73.) *London*, 1806

† (Auditor.) On Mr. Davy's Theory of Chemical Affinity, &c. 8vo. 4 pp. (*Phil. Mag.* xxxii. 370.) *London*, 1808-9

† Articles on Electricity, &c., in Rees's Encyclopædia. 4to. (*Vide* Cavallo and Cuthbertson, 1809.) *London, n. d.*

† (L.O.C.) On Galvanic Electricity. 8vo. 4 pp. (*Phil. Mag.* xlii. 476.) *London*, 1813

† (A. B.) Proposal for an improvement of the Galvanic Trough. 8vo. 2pp. 1 plate. (*Phil. Mag.* xliv. 15.) *London*, 1814

† On the Electric Fluid. 8vo. 1 p. (*Phil. Mag.* xlv. 218.) *London*, 1815

† (A. B.) On the Effects of Galvanism in Asthma and diseases of the respiratory organs. 8vo. 3 pp. (*Phil. Mag.* xlix. 419.) *London*, 1817

† Electrical Phenomena. (*Phil. Mag.* xlix. 390.) *London*, 1817

† (W.) On the supposed Repulsion of Electricity. (*Phil. Mag.* xlix. 208.) *London*, 1817

† Electrical Phenomena. (*Phil. Mag.* xlix. 314.) *London*, 1817

† Electrical Experiments. (*Phil. Mag.* lii. 376, 393, and 387.) *London*, 1818

† Note sur les expériences electro-magnetiques de Œrsted, Ampère, Arago, et Biot. 8vo. 26 pp. (*Arago's copy.*) (*Ext. des Annales des Mines*, 1820.) *Paris*, 1821

† (W. M. G.) On Electricity excited in paper. 8vo. 3 pp. (*Phil. Mag.* lxi. 330.) *London*, 1823

† Article Electricity in Encyclopædia Britannica (old edition), vol. iii. 239. 4to. 21 pp. *Edinburgh*

† Article Electricity in Encyclopædia Metropolitana. 4to. 132 pp. 5 plates. *London*, 1824-25

† Article Galvanism in Encyclopædia Metropolitana, vol. iv. 173 to 224. 4to. 52 pp. 1 plate. *London*, 1826

Navigation by means of Galvanism. (*Glasgow Mechanic's Magazine*, No. 23, *October*, 1826.) 1826

† Specimina Electrica. Habebitur exercitatio in Aula maxima Collegii Romani. 8vo. *Romæ*, 1826

† (E. W. B.) Remarks on one of the experiments from which Mr. Ritchie has inferred the inadequacy of the chemical theory of galvanism. 8vo. 5pp. (*Phil. Mag.* vii. 61.) *London*, 1830

† An attempt to simplify the Theories of Electricity and Light. 8vo. 48 pp. 1 plate. *Edinburgh*, 1834

(S. G.) Relazione ragionata sui fatti, &c., intorno alla singolare virtù dei pesci elettrici prima della scoperta del Galvanismo e della Pila Voltiana. 1838

Steam superseded: an Account of the Electro-magnetic Engine. 18mo. (*Vide* Taylor.) *London*, 1841

† Documents relatifs à l'emploi de l'Electricité pour mettre le feu aux fourneaux des mines et à la démolition des navires sous l'eau. 8vo. 88 pp. 1 plate. (*Extraits du Militaire Spectator Hollandais*, and from *The United Service Journal.*) *Paris*, 1841

† Straordinaria produzione di elettricità in una donna. Fol. 2 pp. (*L'Economista*, vol. i. dell anno 1844. p. 110.) *Milan*, 1844

† Dritte Abhandlung. Von den Eigenschaften und Ursachen der Electricität, welche bei der K. Acad. der Wissenschaften in Berlin eingesendet und . . . des Drucks würdig geschätzt werden. 4to. 102 pp. *Berlin*, 1845

Electricity, &c.—*continued.*

New Theory of Vegetable Physiology based on Electricity. 12mo. *London*, 1847

Railway Appliances; or the Rail, Steam, and Electricity. 12mo. *London*, 1848

Electro Biologie, de wetenschappelijk verklaard. 8vo. (*Translation of Smee?*) *Amsterdam*, 1852

Minas nuevas de guerra, y su aplicacion á la defensa como consecuencia de un reciente descubrimento para emplear la electricidad en la Voladuro de los Hornillos. 8vo. *Madrid*, 1854

† Part of Bulletin des Travaux de l'Académie pendant l'Année 1855. 8vo. (*Toulouse Acad.* 4to. Série v. 398.) At p. 398: *Laroque propose comme sujet de prix: Recherches sur l'Electricité atmosphérique.* At p. 434: *Petit, Notes sur Inclinaison et Declinaison.* *Toulouse*, 1855

Die geographische Verbreitung der elektrischen Fische. 1856

† Elektricitätslehre und Physik der Erde. (*Fortschritte der Physik im Jahre* 1856. *Dargestellt von der physikalischen Gesellschaft zu Berlin.* xii. *Jahrgang. Redegirt von A. Krönig. 2 Abtheilung.*) *Berlin*, 1856

† Electrical Disc and Experiments. By a positive Conductor. 8vo. 96 pp. *London*, 1869

Vorträge, popular-naturwissenschaftliche über neuere Forschungen. 6te Heft. 8vo. 80 pp. (*Inhalt. Ueber Luft-elektricität, Nebel u. Höhenrauch. Nach Untersuchungen d. Verf. v. Ob-Lehr. Dr. F. Dellmann.*) *Kreuznach*, 1870

Haandbog i læren om elektricitet og magnetisme for 1ste ingenieur bataillon. Approberet af Krigsministeriet ved resolution of 18 Oktober, 1869. 8vo. *Kjöbenhavn*, 1870

Mémoire sur l'Eremophilus et l'Astroblepus, sur une nouvelle espèce de Pimelode, sur la Condor, une nouvelle espèce de Gymnote, sur l'Anguille électrique. 4to. (From *Heldon's Cat.* No. 74, 1870.)

Notice sur un appareil électro-magnétique inventé par M. Clarke, Mécan. Anglais. 8vo. (*Zantedeschi?*) *Nancy*, *n.d.*

Electricity—History of.

Istoria dell' Elettricità. Firenze. (*Giornale dei Letterati d'Italia, Firenze*, tom. iv. part iv. art. 6; tom. v. part i. art. 2; part ii. art. 6.) *Firenze*, 1747-48

† Histoire de l'Electricité, traduite de l'Anglais de Jh. Priestley, avec des notes critiques. 3 vols. 12mo. 9 plates. *Paris*, 1771

† Histoire générale et particulière de l'Electricité. (*Vide* Mangin.)

Electro-Metallurgy.

Nouveau Manuel complet de Galvanoplastie, &c. (From *Zantedeschi, Trattato* ii. 440.) (*Jacobi?*) *Paris*, 1843

. . . intorno all' Elettro-metallurgia Italiana quale fu dimostrata e svolta nella memoria letta alla Rl. Accad. . . . di Modena, 19 Dec. 1843, e nel relativo articolo portato dall' Appendice del Foglio periodico di Modena, 8 Feb. 1844. 8vo. (*Nuovi Ann. delle Scienze*, x. 435.) *Bologna*, 1844

Un Chapitre d'Electro-métallurgie. Fabrication des Plaques Argentées pour le daguerréotype. 12mo. 48 pp. *Paris*, 1852

† On the Application of Science to Electro-plate Manufactures. 8vo. (From the *Popular Science Review.*) (*Gore?*) *London*, *n.d.*

Manuale di galvano-plastica e della doratura chimica. Aggiuntovi un ricettario per l'argentatura galvanica sul vetro sulle norme di Figuier, Volta, Brugnatelli, ecc. 2 edizione. 16mo. 94 pp. *Trieste*, 1864

Medical Electricity.

† Lettere sopra l'elettricità principalmente per quanto spetta alla Medicina. 12mo. 81 pp. *Venezia*, 1747

Saggio d'esperienze sopra la medicina elettrica. *Venice*, 1745 ?

Medical Electricity—*continued.*

† Recueil sur l'électricité médicale; dans lequel on a rassemblé les principales pièces publiées par divers savans, sur les moyens de guérir, en électrisant, les malades. 2nd edition. 2 vols. 12mo.

The authors in the 1st volume are—

1, Pivati; 2, Veratti; 3, Sauvages; 4, Jalabert; 5, De la Sone; 6, Quelmals; 7, Zetzell; 8, M . . .

Those in the 2nd volume are—

9, Bianchini; 10, Deshais (vere *Sauvages*); 11, Dufay; 12, Sauvages (lettre à Morand). *Paris*, 1763

† M . . . Réflexions sur les différents succès des tentatives de l'Electricité pour la guérison des Maladies. 12mo. 28 pp. (*Recueil sur l'Elect. Méd.*) *Paris*, 1763

New Thoughts on Medical Electricity; or, Attempt to discover the real uses of Electricity. (From Kuhn. Hist. ii. 319.) *Cambridge*, 1782

Sur les Tracteurs de Perkins. (*Mém. des Soc. Sav. et Let.* ii. 237.)

Recherches sur le Perkinisme, ou de l'influence des Tracteurs métalliques, inventés par le Dr. Perkins, sur certaines maladies. (*Annales de la Soc. de Médec. de Montpellier*, xxix. 274.) *Montpellier*

Observations sur l'Electricité, par M., Chirurgien de la Salpétrière. (A brochure.)

Consectaria Electro-medica. (*Vide* Bertholon, ii. p. 77.)

A Fortunate Cure. (*Guy's Hospital Reports*, vol. viii. part i. 1852, p. 108.) *London*, 1852

Electric Telegraph.

† An Essay, tending to improve intelligible Signals, and to discover an universal Language. From an anonymous correspondent in France (probably the inventor of the Telegraph). Translated from the French. 4to. (*Trans. Amer. Phil. Soc.*, old series, vol. iv. p. 162.) *Philadelphia*, 1799

Rail, Electric Telegraph, and Electric Clock. 12mo. *London*, 1847

Modification of Keisser's Ideas (Telegraph). Letters with Tinfoil intervals. 1848. (*Förster's Bauzeitung*, 1848, p. 238.) 1848

An Article on the Electric Telegraph in the North British Review, vol. xxii. p. 543. (*Vide* W. F. Cooke in the "Reader" Correspondence, Mr. Ronalds and the Electric Telegraph.)

† Electro-magnetiske Telegrapher, en fortælling fra den nyere Tid. 8vo. (A Novel.) *Kjobenhavn*, 1851

The Telegraph Guide, containing general information for sending Telegrams to all parts of England, Scotland, Ireland, and the continents of Europe, Asia, Africa, and America; with a Telegraphic Map of Europe. (*Supplement to the "Electrician."*) *London*

† Instruction pour les Télégraphistes de la Suisse, basée sur l'emploi du Système Steinheil pour l'établissement du Réseau et des Stations. 8vo. 7 plates. 128 pp. *Berne*, 1852

† Die elektrischen Telegraphen. Gemeinfassliche Erläuterungen über die Principien und Apparate der neueren Telegraphie. 8vo. 62 pp. *Stuttgart*, 1852

† Dienst-Anweisung für die telegraphische Correspondenz auf den Linien der Deutsch-Oesterreichischen Telegraphen-Vereins. 4to. 71 pp. *Berlin*, 1853

† Riassunto generale di Telegrafia elettrica. 8vo. *Milano*, 1854

Recueil de prescriptions relatives à l'usage des Télégraphes électriques en Suisse. (Pub. par la Direction du Télég. Suisse.) 8vo. *Berne*, 1854

† Dienst-Anweisung für die telegraphische Correspondenz auf den Linien des Deutsch-Oestereichischen Telegraphen-Vereins. 4to. 80 pp. (Formula marked from A to Q.) *Berlin*, 1855

Le Père de la nouvelle Télégraphie. 4to. *Auch*, 1856

† Télégraphie privée. Tarifs pour la France et l'étranger à partir de Marseille. 8vo. *Marseille*, 1856

Electric Telegraph — *continued.*

† Cheap Telegraphs. 8vo. 12 pp. *London*

† Dienst-Instruction für die Telegraphen Verwaltung. 3 vols. 1118 pp. 4to. *Berlin*, 1860

† Application de la Télégraphie électrique aux usages domestiques. 8vo. 42 pp. 1 plate. (*Extrait de la Revue générale de l'Architecture et des Travaux publics.*) *Paris*, 1862

Télégraphie domestique. Instructions sur la pose et l'entretien des Sonnettes électriques. 12mo. (*Vide* Breguet, 1865.) *Paris*, 1865

Sulla Telegrafia Italiana. 8vo. (From *L'Annuario Bibliografico*, an. i. del. 1863. p. 190.) *Torino*, 1866

† Dictionnaire pour la Correspondance télégraphique secrète; précédé d'Instructions détaillées et suivi de la Convention télégraphique Internationale conclue à Paris, le 17 Mai, 1865. Par un Secrétaire de Légation. 12mo. *Paris and Strasburg*, 1867

† Telegraphic Reform. The Post Office and the Electric Telegraph. 8vo. 46 pp. (Reprinted from the *British Quarterly Review.*) *London*, 1867

Manuel de Correspondance télégraphique, par un Directeur du Télégraphe. 8vo. (From *Reinwald's Catalogue* for 1868, p. 138.) *Paris*, 1868

† Special-Karte der Normal-Verbindungen der Telegraphen-Leitungen des Norddeutschen-Bundes, entworfen und gezeichnet im technischen Bureau der General Telegraphen Direction. Abgeschlossen den 1 Jan. 1868. Folio. 16 Chromolithographs. *Berlin*, 1868

† Notices of the Electro-magnetic Telegraph. (*Vide* Society for the Diffusion of Useful Knowledge (S.)

† Uebersicht der Stationen des Telegraphen Vereines, und des Grossherzogthums Luxemburg, nach Taxquadraten geordnet. 4to. 47 pp. *Berlin*, 1870

Magnetism.

Answer to some Magnetical Enquiries proposed. Pp. 423-24, year 1667, of these Transactions. 4to. (*Phil. Trans.* 1667, p. 478.) *London*, 1667

Several Observations of the respect of the Needle to a piece of Iron held perpendicularly, made by a Master of a Ship crossing the Æquinoctial Line. 4to. (*Phil. Trans.* 1685, p. 1213.) *London*, 1685

Recueil d'Expériences sur l'Aimant, avec la manière de les faire par rapport aux Aimants que l'on spécifie, et aux petites pièces et machines que l'on décrit. Sm. 8vo. 6 + 71 pp. (*Curious and rare.*) *Lyon*, 1686

† M.D.*** Traité de l'Aimant, divisé en deux parties. La première contenant les expériences, la seconde les raisons. 1st edit. 12mo. (*Vide* Dalance.) *Amsterdam*, 1687

† C*** J. A Paper about Magnetism, or concerning the changing and fixing the Polarisation of a piece of Iron. 4to. (*Phil. Trans. for* 1694, xviii. p. 258.) *London*, 1695

† Lettres écrites sur le choix d'une hypothèse de l'Aimant. 12mo. 138 pp. *Lyon*, 1699

† Explication des propriétés de l'Aymant. 4to. 11 pp. 1727

† Traité de la Boussole (en Turc). 8vo. *Constantinople* 1144 = 1732

† Pièces sur l'Aimant. 4to. *Paris*, 1748

† Description des Courans Magnétiques. (*Basin ?*) *Strasbourg*, 1753

† A brief Theory of the North Magnetic Pole. 8vo. (*Note.* This is Lovet's Appendix to his *Philosoph. Essays.*) *Worcester*, 1766

Report on McCullagh's Compasses. *London*, 1778

Physica-magnetica. Variatio, declinationes. . . . (*Opusc. Act. Erudit. Lyps.* tom. i. p. 542.)

Betrachtungen über die Kraft des Magnets. (*Oekonom. Nachr. d. Gesellsch. in Schlesien*, iii. 220.)

Zusammenstellung der, in den letzten Jahren in dem Gebiete des Magnetismus gemachten Erfahrungen. (*Erdmann's Journ.* xlix. 1.)

Magnetism—*continued.*

Ency. Method. Pl. viii. Amusements de Physique. (*Magnetical Apparatus.*)

Ency. Method. Art. vi. 694. (*Artificial Magnetism.*)

† Trismi tonici cæt. per magnetem curatio. 4to. 22 pp. (*Volta's copy.*)

† Article Magnetism, in Encyclopædia Metropolitana. 4to. 113 pp. (*Vide* Barlow.) *London, n. d.*

Remarques sur les Aimans artificiels de Basle (faites par Dietrich, bourgeois et artiste à Basle.) (*Acta Helv.* ii. 264.)

† Magnetism. Observations on the Dip and on the Intensity of the Magnetic Force. . . . By Hansteen. (*Phil. Mag.* lvii. 70.) *London*, 1821

† Observations on the Experiment of Mr. Murray, on the supposed relation between Caloric and Magnetism. "Experimenter." 8vo. (*Phil. Mag.*, lxi. 251.) *London*, 1823

Ency. Method. Physique. Art. Aimant.

Catalogue général des Livres composant les Bibliothèques du Département de la Marine, au mot Aimant. 8vo. 5 vols. (In the *Chambre de Commerce, Bordeaux.*) *Paris*

An unnamed writer in the *Gazzetta di Venezia*, 25 Gennajo, 1839, No. 21, on "Magnetismo Transversale." (*Fusinieri, Riflessioni sopra il Magnetismo Transversale*, in his *Annali*, ix. 19.) *Venezia*, 1839

Terrestrial Magnetism. 8vo. (*Quarterly Review.*) *London*, 1840

(Exploration Scientifique de l'Algérie.) Observations sur le Magnétisme Terrestre. Recherches de physique sur la Méditerranée. 4to. 2 vols. 1846

R***. (*Rieu?*) Examen de quelques Questions de Physique. 8vo. 1 plate. 96 pp. *Genève*, 1847

Essai sur l'Influence que peut avoir la Construction des Corps sur leurs qualités magnétiques. 8vo. 26 pp. *Genève*, 1852

† Essai sur l'Influence de la Polarité moléculaire dans les Phénomènes électriques et magnétiques. 8vo. 1 plate. 57 pp. *Genève*, 1853

Essai sur le Mouvement du Fluide magnétique. 8vo. 21 pp. *Genève*, 1853

De l'Action que paraît exercer le Magnétisme Terrestre sur un Corps construit de couches égales juxta-posées. 8vo. 1 plate. 22 pp. *Genève*

El Magnetismo. Consideraciones luminosas acerca de esta doctrina, por un doctor de la Facultad de Medicina de Paris. Traduccion Castellana. 8vo. *Madrid*, 1855

Walk through the Paris Exhibition of 1855. By F. R., &c. 12mo. (*Magnetical and Meteorological Inst.*, &c. By F. Ronalds.) *London*, 1855

Magnetic Variation.

(B . . . Dr.) Extract of a Letter concerning the present Declination of the Magnetic Needle and the Tydes at Bristol, 1668. 4to. (*Phil. Trans.* 1668, p. 726.) *London*, 1668

Abwechslung von der Magnet-Nadel, nebst einem Calendario magnetis declinantis et inclinantis. 8vo. (*Fragment, probably from a Scientific Journal printed in Germany about* 1746, pp. 311-347.)

† S——, Sir R. A Relation of the Effect of a Thunder-clap on the Compass of a Ship on the coast of New England. 3 pp. Also, a Letter concerning the former Relation. 2 pp. (*Phil. Trans. for* 1683, xiii. pp. 520-21.) *London*, 1683

† Cartes de Déclination et Inclination de l'Aiguille Aimantée, rédigées d'après la Table des Observations Magnétiques faites après les Voyageurs depuis l'année 1775. (*Sic.*) (*Chambre de Commerce, Bordeaux.*)

† Declination of the Needle:

At Toulouse in 1770 = 18° 59′
" " 1780 = 20° 15′
" " 1790 = 21° 5′
" " 1804 = 21° 43′—(1st of Germinal, year 12.)

(*Phil. Mag.* xviii. 369. 1816.) *London*, 1816

Magnetic Variation—*continued.*

† Northern Expedition. 8vo. 6 pp. (*Phil. Mag.* lii. 225.) (*Contains statements as to extraordinary variations of declination and inclination of the magnetic needle.*) *London*, 1818

† Remarks on an important Error in a Table for computing Local Attraction, circulated by order of the Board of Longitude. 8vo. 3 pp. (*Phil. Mag.* lv. 357.) *London*, 1820

† Return of the Discovery Ships. 8vo. 6 pp. (*Phil. Mag.* lvi. 383.) *London*, 1820

† The Arctic Expedition. 8vo. 4 pp. 1 plate (*i.e.* map.) (*Phil. Mag.* lvi. 440.) *London*, 1820

† Tables of the Variation of the Magnetic Needle in different parts of the Globe. (*Edinb. Phil. Journal*, ix. p. 447, and x. p. 116.) *Edinburgh*, 1824

† Mittheilungen über ältere magnetische Declinations-Beobachtungen. 1^te^ Heft. *Wien*, 1850

A Treatise on Terrestrial Magnetism. Containing an outline of the discoveries and theories connected therewith; an inquiry as to whether the terrestrial sphere has four or only two magnetic poles; on the probable causes of terrestrial magnetism; on the irregularities observed in the secular variation, &c. *Edinburgh and London*, 1871

Meteorological Phenomena.

AURORA BOREALIS.

† (J. W.) An Account of the Aurora Borealis observed at Dublin on the 6th of February, 1720-21. 4to. 7 pp. (*Phil. Trans.* xxxi. for 1720-21, 180. *London*, 1721

Rerum Italicarum Scriptores, ab anno æræ Christianæ 1000 ad 1600; quorum potissima pars nunc primum in lucem prodit ex Florentinarum Bibliothecarum codicibus. Tomus primus. Folio. (*Note.* Contains accounts of ancient auroræ, meteors, marvels, &c.) *Florentiæ*, 1748

† Account of an Aurora Borealis, from a Correspondent at Lancaster, Pennsylvania. 4to. 2 pp. (*Trans. Amer. Phil. Soc.* vol. i. old series, p. 338.) *Philadelphia*, 1769

† Article Aurora Borealis in Encyclopædia Britannica, 7th edition, vol. iv. p. 194. 4to. *London and Edinburgh*, 18—

† Aurora Borealis observed at Leeds, London, Derby, Paris, and in Germany, on the 8th February, 1817. 8vo. (*Phil. Mag.* xlix. pp. 155, 223, and 236.) "Herr Stark, at Augsburg, observed that Volta's electrometer and the magnetic needle were almost constantly in motion." Its increased variation was (at one time) 2° 7′ *London*, 1817

Note.—I know of but two other observations of strong electrical signs occasioned (seemingly) by an Aurora, viz., those of Canton, in the *Phil. Trans.* for 1753, p. 350; and of Morozzo (Count), in the *Mém. de Turin An.* 1784-5, tom. i. part ii. pp. 328 and 338. The last very extraordinary.—*Francis Ronalds.*

† Aurora Borealis in northern parts of England and south of Scotland and in Norfolk, &c., 17th October, 1819. 8vo. 3 pp. (*Phil. Mag.* liv. 388.) *London*, 1819

† Aurora Borealis of September 25, 1827. (*Phil. Mag.* ii. 395.) *London*, 1827

† Auroræ Borealeæ on 13th April, 1827, at Gosport (with falling stars, &c.), and on 17th February, 1827. 8vo. (*Phil. Mag.* i. 317.) *London*, 1827

† Aurora Borealis observed at Gosport on the 29th September, 1828. 8vo. (*Phil. Mag.* iv. 392.) *London*, 1828

† Aurora Borealis observed in London December 1, 1828. 8vo. (*Phil. Mag.* v. 77.) *London*, 1829

† Aurora Borealis 19th June, 1830. 8vo. (*Phil. Mag.* vii. 463.) *London*, 1830

† Auroræ Borealeæ, with meteors, on the 5th, 16th, and 17th October, 1830. 8vo. *London*, 1830

† Aurora Borealis, with meteors, on the 20th October, 1830. 8vo. (*Phil. Mag.* viii. 316.) *London*, 1830

Meteorological Phenomena—*continued.*

† Aurora Borealis on the 7th November, 1830, observed at Gosport. 8vo. (*Phil. Mag.* viii. 392.) *London*, 1830

† Aurora Borealis, December 14, 1829. 8vo. (*Phil. Mag.* iv. 158.) *London*, 1830

† Auroræ Boreales, with meteors, on the 1st, 4th, and 7th November, 1830. 8vo. (*Phil. Mag.* ix. 79.) *London*, 1831

† Influence of the Aurora Borealis on the Magnetic Needle. 8vo. 1 p. (*Phil. Mag.* ix. 151.) *London*, 1831

† Aurora Borealis observed at Gosport on the 7th of January, 1831. 8vo. (*Phil. Mag.* ix. 233.) *London*, 1831

† Auroræ Boreales, with meteors, 19th and 20th April, 1831. (*Phil. Mag.* ix. 466.) *London*, 1831

† De Naturali Electricismo ejusque ad Aurorem Borealem applicatione. Dissertatio physicæ. 4to. pp. 11-30.

AEROLITES.

† (P. N. J.) On the production of Aërolites and other solids. 8vo. 3 pp. (*Phil. Mag.* xliv. 321.) *London*, 1814

† On Shooting Stars. 8vo. 2 pp. (*Phil. Mag.* liii. 201.) *London*, 1819

† Aërolite, fell 15th June, 1822, at Juvinas, a village in the arrondissement of l'Argentiers. 8vo. 1 p. A further account of it given by Firman. 8vo. (*Both in Phil. Mag.* lix. 235.) *London*, 1822

† Account of an Aërolite found near Cros (Finistère) on the 15th June, 1822. (*Phil. Mag.* lix. 67.) *London*, 1822

† Caduta d'un Aerolito. 8vo. (*Biblioteca Ital.* xcvii. 424.) *Milano*, 1840

† Bulletin des mois Juillet et Août. 8vo. (*Petit on Asteroids as the causes of High Temperature*, p. 436.) *Toulouse*, 1851

† Bulletin des mois de Juin, Juillet, et Août. 8vo. (*Petit on Asteroids*, p. 431.) *Toulouse*, 1853

METEORS, &c.

Histoire d'un Météore igné. 8vo. 6 pp. (*Mémoires de l'Académie de Dijon*, tom. i. xlii.) *Dijon*, 1769

† Account of an uncommonly luminous Meteor of 13th November, 1803. 8vo. 1 p. (*Phil. Mag.* xvii. 191.) (*Vide* Firmingham.) *London*, 1803

Des pierres Météoriques. 12mo. 30 pp. *Dresden*, 1804

† Meteoric Phenomenon in Middle Quarters, in the parish of St. Elizabeth. 8vo. 2 pp. (*Phil Mag.* xx. 281.) (*This article appears under the heading of St. Iago de la Vega, Oct.* 8.) *London*, 1804

† Meteoric Stone in Russia, 8vo. 1 p. (*Phil. Mag.* xxviii. 373.) *London*, 1807

† On a Meteor of the 17th October, 1808. 8vo. 1 p. (*Phil. Mag.* xxxii. 95.) *London*, 1808

† Singular Sensations, or Shakes experienced on board the ship Favourite on July 14, 1810, in lat. 31° 56′, long. 39° 30′. 8vo. 1 p. (*Phil. Mag.* xxxvi. 395.) *London*, 1810

† Meteor (luminous) seen in Holland. 8vo. 2 pp. (*Phil. Mag.* xxxvi. 395.) (*Note.*—If this account is correct, it presents some very uncommon and interesting facts.) *London*, 1810

† Description of a splendid Meteor seen at Dublin on the 17th April, 1814. 8vo. 3 pp. (*Phil. Mag.* xliii. 303.) *London*, 1814

† Fall of Meteoric Stones in India. 8vo. 1 p. (*Phil. Mag.* xlvi. 155.) *London*, 1815

† A hard body, supposed to be of the nature of a Meteoric Stone, fell during a hard thunderstorm into a window at Glastonbury. 8vo. (*Phil. Mag.* xlviii. 235.) *London*, 1816

† A brilliant Meteor (described in Letter to the Editor, dated Ipswich, 1817). 8vo. 1 p. (*Phil. Mag.* l. 469.) *London*, 1817

Meteorological Phenomena—*continued.*

† Meteor at Aberdeen, &c. (*Phil. Mag.* liv. 75.) *London*, 1819

† Some Observations made at Clapham Common, Surrey, on the heavy storm that took place on the night of Sunday, 30th July, 1820. 8vo. 4 pp. "Philobius." (*Phil. Mag.* lvi. 120.) *London*, 1820

† A singular Meteoric Substance (black leaves like burnt paper, but harder) found in the Museum of Von Grotthus of Courland. According to the Ephemeris of the Leopold Acad., it fell, in great quantities, in Courland, on the 31st January, 1686. 8vo. (*Phil. Mag.* lvi. 157.) *London*, 1820

† Remarks upon Mosely's article on Solar Spots of 1816 in *Phil. Mag.* xlix. 182. 8vo. 3 pp. (*From New Monthly Mag. for January*, 1821. *At* p. 70, *article on Magnetism and on Meteoric Stone; and* p. 72, *Chain Cables as Conductors.*) *London*, 1821

† Meteoric Stone. An aërolite which fell near Kostritz, in Russia, analysed by Stromeyer. 8vo. (*Phil. Mag.* lvii. 70.) *London*, 1821

† Meteor at Brighton. 8vo. (*Phil. Mag.* lviii. 457.) *London*, 1821

† Meteors at Richmond, Virginia, &c. of extraordinary size, and at Rodez, in Aveyron. 8vo. 1 p. (*Phil. Mag.* lix. 399.) *London*, 1822

† Remarkable Meteor (seen at Kreil and at Copenhagen), (*Phil. Mag.* lxii. 238.) *London*, 1823

† Meteor and Earthquakes at Ragusa, in Dalmatia, on 20th August, 1823. 8vo. (*Phil. Mag.* lxii. 315.) *London*, 1823

† Account of a large Meteoric Stone . . . which fell near the village of Kadonah, in the district of Agra. 8vo. *London*, 1827

Rapport sur les travaux de l'Académie des Sciences, 1829. 8vo. (*Séances de l'Acad. de Bord.* 1829, pp. 43 and 59.) *Bordeaux*, 1829

Observations Météorologiques faites à Nijné-Taguilsk (Monts Oural). 4to. (*This is the Livraison for October* 1, 1839, *to December* 31, 1840. *It contains notices of Tonnerre, Orages, Aurore, Météores de Feu, &c. in the Remarks.*) *Paris*, 1842

Report (official) of the fall of a Thunderbolt, or Meteorolite, near Dover. 8vo. *London*, 1853

Boletin del Observatorio Fisico Meteorico de la Habana. Parte i. 4to. *Habana*, 1862

† Catalogue of the Meteorolites in the Museum of the Geological Survey of India, Calcutta. 4to. 9 pp. *Calcutta*, 1866

VARIOUS.

† A Description of the Phenomenon of March 6 last as it was seen on the ocean, near the coast of Spain. With an account of the return of the same sort of appearance on March 31 and April 1 and 2 following. 4to. 3 pp. (*Phil. Trans. for* 1714-15-16.) *London*, 1717

De cælesti quadam Flamma, An. 1743, xiii. Kal. Febr. 4to. (*Commentarii Bononienses*, tom ii. part i. p. 459.) *Bononia*

† Surprising Inundation of the Valley of St. John's, near Keswick, in Cumberland, on the 22d of August, 1749; in a letter from a young clergyman to his friend. Communicated by J. Lock. Read March 15, 1749. (*Phil. Trans.* xlvi. 362.) *London*, 1749-50

† Beschreibung eines Donnerschlages in Gothland. 8vo. (*K. Schwed. Akad.* xv. 80.) *Hamburg and Leipzig*, 1753

† Phenomena cælestia observata. 8vo. *Romæ*, 1754

† Osservazione del Globo luminoso apparso il di 11 Settembre, 1784. 4to. 1 p. (*Opus. Scelti.* vii. 284.) *Milano*, 1784

† A Fire-ball struck a house on the 4th July at East Norton. (*Phil. Mag.* xvi. 191.) *London*, 1803

† Description d'une Trombe de Terre ascendante. 4to. 5 pp. *Turin*, 1808

† Relazione di un Fenomeno osservato nel Porto di Napoli a' 24 Decembre, 1798. 4to. 7 pp. (*Atti dell' Accad. di Siena*, tom. ix. p. 30.) *Siena*, 1808

Meteorological Phenomena—*continued.*

† Atmospherical Phenomena in the River St. Lawrence. 8vo. (*Phil. Mag.* xliv. 91.) *London*, 1814

† Atmospheric Phenomenon, 11th September, 1814. Luminous arch near the City. 8vo. (*Phil. Mag.* xliv. 236.) *London*, 1814

† Combination of the Electric Column, the Thermometer, Barometer, and Hygrometer in one instrument, for electro-atmospherical researches. 8vo. (*Phil. Mag.* xlix. 55.) *London*, 1817

† Waterspout, on 27th June, 1817, observed from Kentish Town. 8vo. 3 pp. (*Phil. Mag.* l. 146.) *London*, 1817

(T. H.) On the identity of Waterspouts and Whirlwinds. 8vo. (*Phil. Mag.* li. 103.) *London*, 1818

† Destructive Waterspout. 8vo. 1 p. (*Phil. Mag.* lii. 68.) *London*, 1818

† (E. F.) Atmospheric Phenomenon. 8vo. (*Phil. Mag.* lviii. 314.) *London*, 1821

† Brilliant Phenomenon observed at sea in 1819. 8vo. 2 pp. (*Phil. Mag.* lix. 157.) *London*, 1822

† Atmospheric Phenomena. An igneous meteor. Article dated Bamberg, Dec. 25, 1821. 8vo. (*Phil. Mag.* lix. 67.) *London*, 1822

Violent Storms and Waterspouts in Belgium. 8vo. 2 pp. (*Phil. Mag.* lxii. 232.) *London*, 1822

† On the Formation of Hail. From the *Gentleman's Mag.* (Electrical Theory). 8vo. (*Phil. Mag.* lix. 93.) *London*, 1822

† ("Glosterian.") On the quantity of Rain collected in two rain-gauges placed at different heights, &c. 8vo. 5 pp. (*Phil. Mag.* lxi. 321.) *London*, 1823

† Uncommon Electrical Phenomenon at Belfast on 11th March, 1849. 8vo. (*Phil. Mag.* xlix. 314.) *London*, 1849

Cyclone at Masulipatam. Reprinted, with additions, from the *Madras Observer* of December 3, 1864. 14 pp. *Madras*, 1864

Lightning, Lightning-conductors, &c.

Neueste Versuche zur Bestimmung der zweckmässigsten Form der Gewitterstangen. (*Deutsch Mus.*, Oct. 1778, pp. 351-62.) 1778

† Maniera pratica di fare li Conduttori . . . 4to. (*Printed by order of the Magistrato della Sanità di Venezia.*) (*Vide* Marzari.) *Venezia*, 1787

Encyclopædia Method. Arts. Article, Paratonnerre. 1782

Einige gegen die Gewitterableiter gemachte Einwürfe beantwörtet. 8vo. *Frankfurt*, 1790

† Dubbii sull' Efficacia dei Conduttori. 8vo. 122 pp. 1 plate. (*Vide* Bragadin.) *Venezia*, 1795

Nachricht und Zeichnung von einer im Jahre 1778, am Schlossthurme, zu Dresden, angebrachten Ableitung. (*Schrift. d. Leipz. ökonomische Societät*, th. v. pp. 222-32.)

† Risposta dell' autore dei Dubbii sull' efficacia dei Conduttori, alla giunta al Giornale Astrometeorologico del Gr. Toaldo. (*Vide* Bragadin.)

† Plain Directions for safe Lightning Conductors for Lightning. 8vo. 49 pp. (*Note. Part of a work. Begins at p.* 33.)

Account of a mass of 7000 Bricks of a Wall displaced several feet by Lightning. 8vo. (*Manchester Memoirs*, ii. 2.) *Manchester, n.d.*

Relazione del Turbine scoppiato in Venezia nel Giorno 16 Giugno, 1805. Data Venezia, 19 Giugno. 8vo. (*Da Rio Giornale*, ix. 266.) *Padova*, 1805

† Instruction sur les Paratonnerres. Fol. 39 pp. (*Vide Comité des Fortifications.*) *Paris*, 1808

(R. R.) Death by Lightning. Man killed at Colwall, near Ledbury, 1817. 8vo. (*Phil. Mag.* l. 315.) *London*, 1817

† On Lightning Conductors of Straw. 1820

† On the Cure of a case of Paralysis by Lightning. 8vo. 2 pp. (*Phil. Mag.* lix. 287.) *London*, 1822

Lightning, Lightning-conductors, &c.—*continued.*

Instruction sur les Paratonnerres. Fol. *Paris*, 1823

† Anleit. zur Verfertigung und Benutzung der Blitzableiter. 8vo. (*Vide* Gay Lussac, &c.) *Strasburg*, 1824

† Tubes formed by Lightning. 8vo. 1 p. (*Phil. Mag.* or *Annals*, iv. 228.) *London*, 1828

Memoir on Lightning Conductors. Reply to a Prize Question. Bordeaux, 1837. (*Vide* Bourges, Secretary of the Bordeaux Academy, Séance 1837, p. 83.) *Bordeaux*, 1837

On the Knowledge of the Ancients concerning Lightning Conductors. 8vo. (*Fraser's Magazine*, 1839?) *London*, 1839?

Sur l'Histoire du Paratonnerre. 1843. (*Le Portique*, 1re livraison, Jan. 1843, p. 51.) 1843

† (R. C.) (Richard or Richardot?) Nouveaux appareils contre les Dangers de la Foudre, ou les Paratonnerres popularisés. 8vo. 1 plate. 58 pp. *Paris*, 1846

† Part of Bulletin des Mois de Mars, Avril, Mai, Juin, Juillet, Août, 1854. 8vo. (*Toulouse Acad.* series 4, vol. iv. At p. 483, De Clos, *Effets de la Foudre sur un Paratonnerre.*) *Toulouse*, 1854

De la Construction des Paratonnerres. Quelques Réflexions sur le Rapport de la Commission de l'Académie des Sciences du 14 Janvier, 1867. 8vo. 29 pp. *Paris*, 1868

Thunderstorms.

† Beschreibung des erschrecklichen Ungewitters und grossen Wasserfluth, so am 29 Mai, 1613, Weimar und anderere Orte überfallen. 4to. 39 pp. *Leipzig*, 1613

Nachricht, glaubwürd. von 3 grossen Ungewittern oder Wettern am 8 Juli, 1663, zu Ullersdorff in Mähren. 663, 4. 1663

† Part of a Letter to D. G. Garden, giving an account of the Effects of a very extraordinary Thunder near Aberdeen. 4to. 3 pp. (*Phil. Trans. for* 1694, xviii.) *London*, 1695

† Riflessioni sopra . . Maffei . . Fulmini. 4to. 52 pp. (*Vide* Ferri.) *Vicenza*, 1748

† Difesa della . . . sentenza che i Fulmini discendono dalle nuvole . . . Riflessioni . . . Venezia, 1749. 4to. 184 pp. (*Vide* Costantini.) *Venezia*, 1749

Four (very short) Accounts (Italian), printed in 1769 in Brescia and in Venice, of a terrible "Fulmine" at Brescia in 1769. 12mo. *Brescia and Venice*, 1769

† Della maniera di preservare gli edificj dal Fulmine: Informazione al popolo, &c. 4to. 38 pp. (*Vide* Toaldo.) At p. 20 is inserted a translation of Saussure's Exposition, entitled *Manifesto ossia breve esposizione dell' utilità dei Conduttori elettrici.* *Venezia*, 1772

† Evenement produit par le Tonnerre le 27 Juin, 1772, à Paris. 12mo. 88 pp. *Paris*, 1772

Verhaltungs Regeln bey nahen Donnerwettern, &c. . . . 8vo. 78 pp. Zweite und vermehrte Auflage. (*Vide* Lichtenberg) *Gotha*, 1775

† Della maniera di preservare . . dal Fulmine. 8vo. 22 pp. *Milano*, 1776

Gewitterbetrachtungen, Gebete, und Danksagung. 8vo. *Heilbronn*, 1780

† (M . .) Osservazioni sopra di un Fulmine, 1783. 4to. 10 pp. (*Opus. Scelti* vi. 347; *Tratta dal* No. 35 *del Giornale . . . dei Confini dell' Italia.*) *Milano*, 1783

† Nuovo metodo di costruire i Parafulmini praticato in Padova. 4to. 2 pp. (*Opuscoli Scelti*, vi. 380.) *Milano*, 1783

Dissertazione sopra i supposti Fulmini. 4to. (*Note. The figures represent ancient instruments of stone, mistaken, he says, by some authors for "Pietre di Fulmini."*) *Venezia*, 1784

Gewitterkatechismus. 8vo. *Augsburg and Wien*, 1797

Anzeigen der nothwend. Verhaltungsregeln bey nahen Gewittern. 8vo. *Gorlitz*, 1798

Thunderstorms—*continued.*

Onderrigtingen omtrent de wyse op welke menzich to gedragen hooft by het opkomen van Onweder, &c. 8vo. 2nd edition. 1 plate. 104 pp. (*Translated from the German.*) *Amsterdam*

De Fulminibus quibusdam (aus der Erde.) 4to. (*Commentarii Bononienses*, tom. ii. part i. pp. 460-64.)

Rathgeber bey Gewittern. 8vo. *Pirna*, 1807

Miscellaneous.

Curiöse Speculationes bey schlaflosen Nachten von einem Leibhaber der immergern speculirt. 8vo. *Chemnitz and Leipzig*, 1707

Schediasma physicum. 4to. *Vittemberg*, 1715

† Auszug aus verschiedenen eingelaufenen Berichten von seltsamen Knallen die man in Swenskeby gehört. 8vo. 3 pp. (*K. Schwed. Akad.* xiv. 326.) *Hamburg and Leipzig*, 1752

Nachricht von einer Erfindung einer Flinte aus welche man in 2 Minuten zehnmahl schiessen kann und wovon die Elektricität der Grund seyn soll. 8vo. *Stutgardt*, 1762

Schreiben eines Geistlichen. (*Vide* Jaquet.) *Wien*, 1776

Raccolta d' Opuscoli scientifici . . . di Autori Italiani. 4to. (From *Opusc. Scelti*, ii. 44.) *Ferrara*, 1779

Gedanken über die anziehenden Kräfte welche bei der chemischen Auflösung ze. (*Sic.*) 8vo. *Prag*, 1779

Table analytique, &c. Contents of the Dictionary of Sciences, Arts, &c., and its Supplement. 2 vols. folio. (*Opuscoli Scelti*, 4to. iii. 22.) *Paris*, 1780

Monatliche Früchte einer gelehrten Gesellschaft in Ungarn. 8vo. Pest. und Ofen. (*Kuhn N. Entdeck*, i. 27, who says that this book could scarcely be had, and that his account of it is derived from a notice in the *Allgemeine Deutschen Biblioth.* b. 74, st. 1, pp. 214-16. He refers to it on the subject of "the electric matter being a fire.") *Brachmonath*, 1784

Geschichte einer ausserordentlichen Begebenheit. 8vo. *Frankfort*, 1785

Fisici dubbj dedicati agli amici del vero. 74 pp. 1791 ?

Comment. mortis historiam causa et signa sistens. *Goettingae*, 1794

Diario de los nuevos discumbrimientos, &c. 8vo. (*Opuscoli Scelti*, xviii. 24.) *Madrid*, 1793

† On the Opinions which have prevailed respecting the Nature of Alkalis and Earths. With Note by the Editor. 8vo. 5 pp. (*Phil. Mag.* xxxii. pp. 18-22.) *London*, 1808

† Extract of a short Article on Volcanoes, from a recent French Journal. 8vo. 1p. (*Phil. Mag.* xxxv. 235.) *London*, 1810

† Experiments on Capillary Syphons, with electrified and with heated Liquids. 8vo. (*Phil. Mag.* xlii. 202.) *London*, 1813

† A Review of some leading Points in the official Character and Proceedings of the late President of the Royal Society. 8vo. 14 pp. (*Phil. Mag.* lvi. pp. 161 and 241.) *London*, 1820

Dictionnaire des Découvertes, Inventions, &c., en France, 1789 à 1820. Par une Société de Gens de Lettres. 8vo. 17 vols. 1822-24

(R. N.) Notice respecting the real Inventor of the Steam Engine. 8vo. 2 pp. (*Phil. Mag.* lvii. 426.) Said to be Saml. Morland, 1632. *London*, 1821

Il propagatore dei Paragrandini convinto da sè stesso della loro inutilità; ossia confutazione della difesa dei paragrandini di A, B, C, D. *Milano*, 1824

Notice sur les Travaux de la Classe des Sciences de l'Acad. de Toulouse. 8vo. (*Toulouse Acad.* 2me série, i. 93.) *Toulouse*, 1827

Repertorium Bibliograph. 8vo. *London*

† (Z. L. V.) *i.e.*, Volta, Zanino, and Lo. Sopra alcuni Errori Biografici e Fisici del Biot. Sm. 8vo. 48 pp. (*Raccolta Pratica di Zanino, Volta, ed altri, Anno* ii.) (*Note. The errors referred to are those relative to (his father) A. Volta's writings, &c.*) *Como*, 1833

Miscellaneous—*continued.*

Lettere inedite di quaranta illustri Italiani, del secolo (Muratori, Volta, Tiraboschi, &c.) 8vo. *Milano*, 1836

Une Masse de Grillons de 19 pieds, 10 pouces (Anglais) de puissance. (*Asiatic Journal for November*, 1838.) 1838

Account of Une Masse de Grillons de 19 pieds, 10 pouces (Anglais) de puissance. (*Asiatic Journal, November*, 1838.) 1838

Apparatus zur Entdeckung des Scheintodes im Grabe, erfunden von J. A. Meier. Nebst Bermerkungen eines prakt Arztes. 8vo. *Berlin*, 1843

† Résumé des Travaux de l'Acad. pendant les Années 1839-41. 8vo. (*Toulouse Acad.* 2me serie vi. pp. 4 and 6. References to *Pinaud*, *Fuzeau*, *Hombre Firmas*, &c.) *Toulouse*, 1843

† Bulletin du mois de Mai, 1850. 8vo. (At p. 248, *Leymerie on the Tourmaline.*) *Toulouse*, 1850

† Bulletin du mois de Mars. 8vo. (*Toulouse Acad.* 4me série, i. 233. Notice of *Petit's* verbal communication on *Une Chute de Pluie par un Ciel parfaitement serein*, p. 234.) *Toulouse*, 1851

† Bulletin des mois Avril et Mai. 8vo. (*Toulouse Acad.* 4me série, i. 319-20. At p. 319, allusion to reply of *Petit* to *La Verrière ou Bolides.* At p. 320, *Lecture d'une Lettre par Petit . . . Chute de Pierre à Escal.*) *Toulouse*, 1851

Papers on Subjects connected with the Duties of the Corps of Royal Engineers (Blasting, &c.) *London*, 1851

† Table Générale des 31 premiers Vols. des Comptes Rendus, Années 1835-50. 4to. 1018 pp. *Paris*, 1853

† La Società di mutua Assicurazione contro la Grandine e gl' Incendi. Memoria al Parlamento Italiano. 4to. *Milano*, 1861

Nouvelle Dissertation. (*Vide* Morin.)

† (B . . . R.) Insetti luminosi dell' America. 8vo. 2 pp. (*Biblint. Ital.* lix. 424.) *Milano*, 1830

B

B., A. (*Vide* Anon. Electricity.) 1814

B., W. A. (*Vide* Anon. Electricity.) 1830

B * * *, Dr. (*Vide* Anon. Magnetic Variation.) 1668

B * * *, R. (*Vide* Anon. Miscellaneous.) 1830

Baader, Franz Xavier von. (*Born March* 27, 1765, *at Munchen; died March* 23, 1841, *at Munchen.* Ueber den Blitz, als Vater des Lichts. . . . 8vo. *Nurnberg,* 1815

† **Babinet,** Jacques. *Born March* 5, 1794, *at Lusignan, départ. Vienne; died October* 21, 1872, *Paris.* Exposé des nouvelles Découvertes . . . par Œrsted, &c. 8vo. (*Vide* Ampère et Babinet.) *Paris,* 1822

Notice sur l'établissement des lignes Télégraphiques. 4to. (*Revue des Deux Mondes,* 1er *Semestre,* 1853.) *Paris,* 1853

† Etudes et Lectures sur les sciences d'observation et leurs applications pratiques. Premier vol. 12mo. 221 pp. *Paris,* 1855

† Etudes et Lectures sur les sciences d'observation et leurs applications pratiques. Sixième vol. 12mo. 261 pp. *Paris,* 1860

Bacelli, Liberato Giovanni. *Born November* 18, 1772, *at Lucca; died October* 21, 1835, *at Bologna.* Lettere due sopra i fenomeni Elettro-magnetici. (*Venet. Lomb. Institt.* iv. 48.) *Carpi,* 1820

† I fenomeni Elettro-magnetici a due leggi ridotti, con la loro cagione tolta dall' opinione Symmeriana. Ragionamento. 8vo. 86 pp. (*Vide* Barlocci, 1826, p. 280.) *Modena,* 1821-28

† Risultati dell' esperienze fatte dal Bacelli intorno all' azione dei fili di metallo elettrici sugli aghi calamitati e non calamitati. Comunicati alla Rle. Accad. di Modena. (Dal *Messaggiere Modenese,* No. 38, il 12 Maggio, 1821.) Con note inedite del medesimo Professore. 8vo. (*Biblioteca Ital.* (*Stella*) xxiii. 76.) *Milano,* 1821

Reference to his new Electrical Machine, described, with some hydraulic and optical apparatus, 19th July, 1834, at the University of Modena. (*Verona Poligrafo,* nuov. s. iii. 1834, p. 83.) 1834

Sul Magnetismo del rame e di altre sostanze. . . . (*Poggendorff,* i. 83.)

Bache, Alexander Dallas. *Born July* 19, 1806, *at Philadelphia.*

On the diurnal Variation of the Horizontal Needle. 4to. (*Trans. Amer. Phil. Soc.* new series, v.) *Philadelphia,* 1837

† Discussion of the Magnetic and Meteorological Observations made at the Girard College Observatory, Philadelphia, from 1840 to 1845. In Three Sections and Nine Parts. (*Smithsonian Contributions.*) *Washington,* 1840-45

† Report (as Chairman) of the Compass Committee of the National Academy of Sciences. (*Vide* National Academy of Sciences.) 1864

† Observations of the Magnetic Intensity at twenty-one stations in Europe. Read March 6, 1840. 4to. (*Trans. Amer. Phil. Soc.,* new series, vii. 75.) (*Faraday's copy*) *Philadelphia,* 1841

Notice of Experiments on Electricity developed by Magnetism. 8vo. (*Journal of the Franklin Inst.*) *Philadelphia,* 1832

Note of the Effect upon the Magnetic Needle of the Aurora visible at Philadelphia 17th May, 1833. 8vo. (*Journal of the Franklin Inst. July,* 1835.) 1835

Observations on the Disturbance in the direction of the Magnetic Needle during the Aurora of 1833. 8vo. (*Journal of the Franklin Inst.*) 1833

Bache—*continued.*

† Observations upon the facts recently presented by Professor Olmsted in relation to Meteors seen on the 13th November, 1834. 8vo. (*Journal of the Franklin Inst.* xvii.) 1836

† 1. On Franklin. . . . Storms. 2. On Rain. 3. On the Discovery of the Non-conducting Power of Ice. 8vo. (*Journal of the Franklin Inst.* xvii.) 1836

† Notes and Diagrams illustrative of the directions of the forces acting at and near the surface of the earth in different parts of the Brunswick Tornado of June 19, 1835. 4to. 2 pp. (*Trans. Amer. Phil. Soc.* v. 407.) *Philadelphia*, 1837

Observations at the Magnetical and Meteorological Observatory at the Girard College, Philadelphia, made under the direction of A. D. Bache, LL.D. . . 3 vols. 8vo. (*Trübner's Bibl. Guide*, p. 195, says, Printed 1847.) *Washington.* 1840-45

† Records and Results of a Magnetic Survey of Pennsylvania and parts of adjacent States in 1840 and 1841, with some additional records and results of 1833-35, 1843, and 1862, and a Map. fol. 32 pp. *Washington*, 1863

† **Bache**, A. D., **and Courtenay**, E. H. Observations to determine the Magnetic Dip at Baltimore, Philadelphia, New York, West Point, Providence, Springfield, and Albany. 4to. Read November 7, 1834. (*Trans. Amer. Phil. Soc.* v. new series, p. 209.) *Philadelphia*, 1836

† On the relative horizontal Intensities of Terrestrial Magnetism at several places in the United States, with the investigation of corrections for temperature, and comparisons of the methods of oscillation, in full, and in rarefied air. 4to. 31 pp. Read May 6, 1836. (*Trans. Amer. Phil. Soc.* v. 427.) *Philadelphia*, 1837

† **Bachhoffner**, G. H. A popular Treatise on Voltaic Electricity and Electro-magnetism. 8vo. 35 pp. 1 plate. *London*, 1838

On the difference between the Effects of an Apparatus of Induction according to the placement of a cylinder of iron or a bundle of iron wires in the bobbin. (From Matteucci, 1854, p. 137.)

Vide also Sturgeon and Backhofner.

Bacon, Francis Lord. *Born January*, 22, 1561, at *London; died April* 9, 1626, *at Highgate.*
Physiological Remains. (*From his Works, edition of* 1803, vol. ii. p. 215.) *London*, 1648

Bacon. Chart of the Atlantic Telegraph. *London*

† **Baeblich**, H. Das Nordlicht nach den Resultaten der neusten Forschungen erklärt. *Berlin*, 1871

Baeckel. Thèse de l'Ozone. 4to. (*Leiber. Cat. of* 1865, p. 21.) 1856

Baehrens, J. C. F. Beschreibung einer neuen astronom-geometrischen Bussole. *Halle*, 1793, *und Zusätze dazu* 1794

Baer, W. Elektricität und Magnetismus. Die Gesetze und das Wirken dieser mächtigen Naturkräfte und ihre Bedeutung für das praktische Leben. 8vo. 324 pp. (*Zuchold's Cat.* 1863, p. 145.) *Leipzig*, 1863

Baffin, Wm. In 1612-1616 made voyages in the waters of N. W. America, in which he instituted observations of magnetic declination and inclination.

Bag. On Magnetism, or the doctrine of equilibrium. 12mo. *Detroit, U.S.*, 1845

Baggs, Isham. Electric Telegraphy by Steam. (Advert^{t} in "*Times*," Dec. 11, 1857.)

† **Bagnolo**, Giovanni Francesco Giuseppe. *Born* 1709 *at Turin; died about* 1760. Lettera intorno all' Aurora Boreale, veduta la notte de' 16 Dec. 1737, e di alcune altre cose erudite . . . (*Calogero, Raccolta*, xx. 189. Original.) 12mo. 29 pp. 1 plate. *Venezia*, 1739

† **Bähr**, J. K. Ueber die Einwirkung der Reibungs-Elektricität auf das Pendel. 4to. 56 pp. *Dresden*, 1870

Baier, J. W. De Fulmine, fulgure, et tonitru hiemale. 1706

† **Baille,** J. L'électricité. 2nd edition. 12mo. 344 pp. (*Forms part of Bibliothèque des Merveilles par Charton.*) *Paris,* 1869

Bailly, Charles François. *Born May* 8, 1800, *at Merlieux, near Laon.*

Bailly de Merlieux. Résumé complet de Météorologie . . . Météores . . . électriques, &c. . . . 32mo. *Paris,* 1830

Bailly, Jean Sylvain. *Born September,* 15, 1736, *at Paris; died November* 12, 1793, *at Paris.* Rapport des Commissaires chargés par l'Académie des Sciences de l'examen du Magnétisme animal. 8vo. *Paris,* 1784

† **Bain,** A. On Electro-magnetic Printing Telegraph and Clock. 8vo. (*Vide* Finlaison.) *London,* 1843

A short History of the Electric Clocks, with explanations of their principles and mechanism, and instructions for their management and regulation. 8vo. 31 pp. *London,* 1852

† Mémoire sur les Horloges, les Télégraphes, et les Lochs électriques. 4to. (*Comptes Rendus,* xxi. 885.) *Paris,* 1845

M. Bain présente un Modèle de la Machine qui sert à former les signaux dans son télégraphe électrique. 4to. (*Comptes Rendus,* xxi. 885.) *Paris,* 1845

M. Arago met sous les yeux de l'Acad. deux modèles d'horloges électriques inventés par M. Bain, et un loch, imaginé par le même ingénieur, loch qui donne la mesure, non seulement, comme les appareils ordinaires, de la vitesse du navire à un instant donné, mais de l'espace parcouru dans l'intervalle de deux observations, quelle qu'ait pu être, pendant ce temps, la variation de la vitesse. 4to. (*Comptes Rendus,* xxi. 923.)

Note.—Moigno, p. 156, *says that the Memoir on the Log was missing, or suppressed in the Academy.* *Paris,* 1845

The Petition of Alexander Bain. (*Vide* Moigno, 1852, p. 100.) *London,* 1845

Sur quelques améliorations récemment introduites dans les Télégraphes Electriques. 4to. (*Comptes Rendus,* xxx. 478-525.) *Paris,* 1850

† Electric Clocks. 4to. 3 pp. *London,* 1852

Mr. Joseph Whitworth's Special Report, presented to the House February 6, 1854, chap. xi. p. 28, Electric Telegraph. (*The Report is headed New York Industrial Exhibition.*) 1854

Several Articles by Brewster concerning him. . . . (*North British Review.*)

† A Treatise on numerous applications of Electrical Science to the Useful Arts. Part i. 8vo. 35 pp.

Experiments (repeated) in Hyde Park. Moisture of the Earth or Water (natural body of) used as part of the circuit, &c. &c. 4to. (*Literary Gazette, June* 4, 1842.) *London,* 1842

Vide also Finlaison, Wright and Bain, and Patents.

† **Bain and Wheatstone.** Controversy on the Electro-magnetic Telegraph Clock and the Electro-magnetic Printing Telegraph. 4to.

Note.—This is a collection of four Letters to the Editor of the *Literary Gazette,* inserted in the numbers for June 11 and 18 and August 6 and 20. They have been cut out, and the above title affixed in MS. *London,* 1842

Bain (not Alex.) (*Vide* Reid and Bain.)

† **Bain,** G. Saggio sulla Variazione dell' Ago magnetico . . . Trad. dall' Inglese. 8vo. 148 pp. *Venezia*

Bain, W. *Born* 1775, *at Culross, Perthshire; died September* 11, 1853, *at Grange, Essex.* An Essay on the Variation of the Compass, showing how far it is influenced by a change in the direction of the ship's head, with an exposition of the dangers arising to navigators from not allowing for this change of variation. Interspersed with practical observations and remarks. 8vo. 140 pp. 1 chart. *Edinburgh,* 1817

† **Bajon.** *Died* 1790. Descrizione di un Pesce che dà la scossa elettrica conosciuto a Cayenne sotto il nome d'Anguilla tremante. Traduzione. 12mo. (*Scelta d' Opuscoli.*) (*Is this translated from the Phil. Trans.* 1773, p. 481 ? *Vide* Humboldt, p. 50.) *Milano*, 1775

Mémoires pour servir à l'Histoire de Cayenne.

† **Baker,** H. A Letter from H. Baker to the President concerning several medical Experiments of Electricity. Read March 13, 1748. 4to. 6 pp. (*Phil. Trans.* xlv. 270.) *London*, 1748

† A Letter from H. Baker to the President, containing Abstracts of several Observations of Aurorœ Borealeș lately seen. 4to. (*Phil. Trans.* xlvi. 499.) *London*, 1749-50

† **Baker, Knight, Freeman, Fauquier, Miles, Martin, &c.** A collection of several Papers laid before the Royal Society concerning several Earthquakes felt in England and some neighbouring countries in the year 1750, 4to. (*Appendix to the Phil. Trans. for* 1750, vol. xlvi.) *London*, 1750

† **Baker.** Baker's patent Anti-Incrustator Apparatus for removing scale from Steam Boilers, and preventing its formation. 8vo. (*Principally Testimonials.*) *London*, 1866

Baker. (*Vide* Fenwick and Baker.)

Bakewell. Electricity: its History . . . and Applications. 8vo. (*From Advertisement.*) *London*, 1853

† **Bakewell,** F. C. A Manual of Electricity, practical and theoretical. Second edition, revised and enlarged. 8vo. 310 pp. *London and Glasgow*, 1857

A Manual of Electricity, theoretical and practical. Third edition, revised and enlarged. 8vo. *London*, 1859

† The Copying Telegraph, invented by Bakewell. 4to. *London*, 1850

Trial of the Autographic Electric Telegraph of Mr. Bakewell. 4to. (*Literary Gazette, Sept.* 23, 1847.) *London*, 1847

Balbi, Paolo Battista. *Born February* 17, 1693, *at Bologna; died December* 7, 1772, *at Bologna.* Descriptio Ignei Globi per aera improviso excurrentis. 4to. (*Comment. Bononienses*, i. 285.) *Bonon.*

Balbo, Prospero, Conte. *Born July* 2, 1762, *at Chieri, Turin; died March* 14, 1837, *at Turin.*

Note.—The great friend and patron of Beccaria; sons and other relations still living in Turin (1860). Possibly some of Beccaria's valuable or curious MSS. left in his hands may be discoverable.—*F. R.*

Lettere di B. Franklin a G. Beccaria volgarizzate dal conte Prospero Balbo.

(*Note.*—This work begins at p. 145, and forms part of Eandi's Memorie Istoriche di Beccaria, 1783. There are six Letters—1st dated Londra, 29 May, 1766; 2nd, Lond. Settem. 1768; 3rd, Lond. 11 Agost. 1773; 4th, Lond. 25 May, 1774-5; 5th, Passy, 19 Nov. 1779; 6th, Passy, 19 Feb. 1781.)

Balcells, J. Lithologia Meteorica. 4to. *Barcelona*, 1854

Baldassini, F. Conte. Sopra gli Animali Microscopici considerati come causa unica della Fosforescenza del Mare, Osservazioni. 8vo. 34 pp. (*Poligrafo*, viii. 1835.) *Verona*, 1835

Baldi, L. Memoria sui Telegrafi Elettrici. *Pistoia*, 1851

† **Baldini,** Giovanni Francesco. *Born February* 4, 1677, *at Brescia; died* . . . 1765, *at Tivoli bei Roma.*) Relazione dell' Aurora Boreale veduta in Roma li 16 Dec. 1737. 12mo. (*Calogera's Raccolta*, xvii. 47.) *Venezia*, 1738

Baldung. (*Vide* Waldung.)

† **Baldwin,** L. An Account of a very curious appearance of the Electric Fluid produced by raising a kite in the time of a thundershower; in a Letter to J. Willard. 4to. (*Memoirs of American Acad.* i. part ii. 257, old series.) *Boston*, 1785

Baldwin—*continued.*

† Observations on Electricity, and an improved mode of constructing Lightning-rods; in a Letter to Jos. Willard. 4to. (Letter dated January 25, 1797.) (*Memoirs of American Acad.* ii. part ii. 96, old series.)
Charlestown U.S. 1804

† **Balestrini,** A. La Telegrafia Elettro-magnetica. 12mo. 48 pp. *Torino,* 1851

† **Balestrini,** P. A. Description du système de Télégraphie sous-marine de M. P. A. Balestrini, par M. P. de Branville. 8vo. 8 pp. (*Mémoires de la Soc. des Ingénieurs Civils.*) *Paris*

Ball. The Electric Telegraph applied to meteorological announcements. 8vo. (*Brit. Assoc. Report. Meeting at Swansea in September,* 1852.)
London, 1852

Ballard. On the Magnetism of Drills. 4to. (*Phil. Trans.* 1698, p. 417.)
London, 1698

Ballot. (*Vide* Buys-Ballot.)

Balthasar, Augustin. *Born September* 23, 1632, *at Anclam; died November* 20, 1688, *at Greifswald.* (*Pogg.* i. 95.)

† **Bamberger,** B. Elektricität und Magnetismus, als Heilmittel. 8vo.
Berlin, 1854

† **Bammacaro,** Niccolò. *Born . . . at Neapel; died about* 1778. Tentamen de vi Electrica ejusque phænomenis. 8vo. 202 pp. *Neapoli,* 1748

† **Bancalari,** Michele Alberto. *Born* 1805, *at Chiavari.* Lettera al Belli sulla repulsione che l'Elettro-magnetismo esercita sulla fiamma e sul fumo. 4to. 1 p. (*Giorn. dell' I. R. Ist. Lomb.* nuova serie, i. 271.) *Milano,* 1847

Bancroft, Edward Nathaniel. Saggio sulla storia naturale della Guiana.
Natural History of Guiana. (*From Prins,* p. 8, *on Electrical Fish.*) (*Humboldt, Voyage,* part ii. *Zoology,* p. 50, *says Essay on Guiana,* 1769, p. 191.)

† **Bangma,** O. S. Wiskundige verhandeling over het aardische Magnetismus. 4to. 75 pp. 1 plate. (*Lid van het Koninklijk Instituut den Wittenschappen Letterkunde en Schoone kunsten.*) *Amsterdam,* 1824

† **Banks,** Sir Joseph. *Born December* 13, 1743; *died June* 19, 1820.
Biographical Memoir of the late Right Hon. Sir Joseph Banks, Bart. 8vo. (*Phil. Mag.* lvi. 40.) *London,* 1820

Bapst avec **Asais.** Explication et emploi du Magnétisme. 8vo. *Paris,* 1817

Bar, W. Elektricität und Magnetismus. (*Calvary Cat.* No. lxii. 1869, p. 2.)
Leipzig, 1863

† **Barbançois,** Charles Hélion, Marquis de. *Born August* 17, 1760, *at Schloss Villegongis; died March* 17, 1822. Lettre addressée à M. Delametherie, contenant un Essai sur le fluide électrique. 8vo. 70 pp. *Paris,* 1817

† **B * * *,** le Marquis de (*i. e.* Barbançois.) Deux Lettres écrites en 1819 à M. le Président de l'Acad. . . . La première relative à un système sur l'Electricité; la seconde relative à un Tableau des Sciences. 8vo. 38 pp. and table.
1819

Barber. (*Vide* Morgan and Barber.)

† **Barberet,** Denis. *Born December* 27, 1714, *at Arnay le Duc, Burgundy; died after* 1776.

Dissertation sur le rapport qui existe entre les phénomènes du Tonnerre et ceux de l'Electricité, qui a remporté le prix. 4to. 16 pp. *Bordeaux,* 1750

Discours qui a remporté le prix . . . de l'Acad. de Bordeaux en 1850. Phénomènes du Tonnerre et le l'Electricité. 4to. (*Printed in or for the Mém. Acad. Dijon.*) *Dijon,* 1751

Sur la nature et la formation de la Grêle. 8vo. (*Mém de l'Acad. de Dijon,* tom. i. p. 1.) *Dijon,* 1769

† **Barbeu du Bourg.** Œuvres de Franklin, traduites de l'Anglais sur la 4me édn. avec additions nouvelles, &c. 2 vols. 4to. 12 plates. *Paris,* 1773

Barbier, A. Recherches sur l'Electricité des Gaz et des Liquides. 8vo. 27 pp. *Bordeaux*, 1858

† **Barbier de Tinan.** Mémoires sur les Conducteurs pour préserver les édifices de la foudre; par l'Abbé Jh. Toaldo; traduits de l'Italien avec des Notes et des Additions, par M. Barbier de Tinan. . . . 8vo. 241 pp. 3 plates. *Strasbourg*, 1779

† (Nuove) Considerazioni sopra i conduttori del Sig. Barbier di Tinan. Tradus. dal Francese. 4to. 43 pp.

Note.—This is a printer's translation of Barbier's Considerations sur les Conducteurs en général, appended to his translation of Toaldo's Dei Conduttori per preservare gli edifizj da Fulmini. 4to. 1778, nuova edn. *Venezia*, 1779

† Mémoire sur la manière d'armer d'un Conducteur la Cathédrale de Strasbourg et sa tour. 8vo. 34 pp. (*Volta's copy.*) *Strasbourg*, 1780

† **Barbieri,** Ludovico Duca. *Born June* 24, 1719, *at Vicenza; died after* 1756. Discorso sopra la Generazione e Natura de' Fulmini. 12mo. (*Calogera's Raccolta*, xxx. 291. *Recitato nell' Accad. de Ricoviati in Padova, Maggio*, 1741.) *Venezia*, 1744

† Lettera del Sig. Conte Barbieri al . . . Rev. Sig. D. Domenico S. Della Generazione e Natura de' Fulmini. 12mo. 68 pp. (*Calogera Raccolta d' Opuscoli*, tom. xli. p. 177.) *Venezia*, 1749

† **Barca,** Alessandro. *Born November* 26, 1741, *at Bergamo; died June* 13, 1814, *at Bergamo.*

Conghiettura sulla Elettricità. 12mo. 6 pp. (*Scelta d' Opuscoli*, xvii. 87.) *Milano*, 1776

Barca, G. M. Opere in Latino. *Messina*, 1756 (?)

Bardenfleth. Om Orkaner. . . . 4to. 70 pp. (*Kopenh. Acad.*) *Kopenhagen*

Bardenot, J. R. P. Les Recherches . . . de Bichat sur la Vie et la Mort réfutées. 8vo. *Paris*, 1824

† **Barham,** H. A Letter to the Publisher, giving a relation of a Fiery Meteor seen by him, in Jamaica, to strike into the earth; with Remarks on the Weather, Earthquakes, &c., of that island. 4to. 2 pp. (*Phil. Trans. for* 1718, p. 837.) *London*, 1718

† **Barker,** C. On various Electrical Apparatus, &c. Letter to Editor, 30th August, 1839. (*Roget's copy.*) (*Annals of Electricity*, iv. 22.) *London*, 1839

† **Barker,** F. Dissertatio Physiologica inauguralis de inventu Galvani, vulgo, anima lium electricitate. 8vo. 34 pp. (*Brugnatelli's copy.*) (*Giornale Fis. Med. d' Brugnatelli, An.* ix. 1796, p. 58.) *Pavia*, 1796

† **Barker,** Thos. An account of an extraordinary Meteor seen in the county of Rutland, which resembled a waterspout. 4to. 2 pp. (*Phil. Trans.* xlvi. 248.) *London*, 1749-50

† **Barker.** Mariner's Compass, with letter-press Instructions. Card-plate and movable diagram. *London*, 1860

† **Barletti,** Carlo. *Died February*, 1800, *at Milan.*

Nuove Sperienze Elettriche, secondo la Teoria del Sig. Franklin e le produzioni del P. Beccaria. 8vo. 134 pp. *Milano*, 1771

† Physica specimina. (Electricitas.) 8vo. 184 pp. 1 plate. *Mediolani*, 1772

† Lettera al Volta sopra d'un nuovo Elettroforo. 12mo. 4 pp. (*Scelta d' Opuscoli*, xiv. 97.) *Milano*, 1776

† Dubbii e Pensieri sopra la Teoria degli Elettrici Fenomeni. (There is a Letter to Volta at p. 118.) 8vo. 136 pp. 1 plate. *Milano*, 1776

† Analisi di un nuovo fenomeno del Fulmine ed Osservazioni sopra gli usi medici della Elettricità. 4to. vi. 63 pp. 1 plate. *Pavia*, 1780

† Introduzione a nuovi principii della Teoria Elettrica dedotti dall' analisi de' fenomeni delle elettriche punte. Parte Prima. 4to. 54 pp. (*Mem. Soc. Ital.* tom. p. 1.) *Verona*, 1782

Barletti—*continued.*

† Introduzione a nuovi principii della Teoria Elettrica dedotti dall' analisi dei fenomeni delle elettriche punte. Parte Seconda. 4to. 122 pp. (*Mem. Soc. Ital.*. tom. ii. p. 1.) *Verona*, 1784

† Fisica particolare e generale in Saggi . . . 4 volumi. Tomi i. ii. iii. di Calore, Meteorologia, Aerologia, Ottica. 8vo. *Pavia*, 1785-86

Descrizione de' fulmini di Porta Comasina, e del Duomo di Milano, e de' confronti loro coi principali effetti dei fulmini. 1785

Dei Conduttori del fulmine . . .

† Saggio analitico di alcune lucide Meteore. 4to. 38 pp. (Previously published in his Fisica particolare e generale, tom. ii.) (*Mem. Soc. Ital.* iii. 331.) *Verona*, 1786

† Della supposta eguaglianza di contraria Elettricità nelle due opposte facce del vetro, o di un strato resistente, per ispiegare la scarica o scossa della boccia di Leyden. 4to. 6 pp. (*Mem. Soc. Ital.* iv. 304.) *Verona*, 1788

† D'immutabile capacità, e necessaria contrarietà di eccesso e difetto di Elettricità negli opposti lati del vetro, o di altro strato resistente supposta da Franklin, per la spiegazione della carica e della scarica Elettrica nella boccia Leidense. 4to. *Verona*, 1794

† **Barlocci,** Saverio. *Born December* 3, 1784, *at Rome; died May* 25, 1845, *at Rome.* Congetture sull' origine de' Fuochi Vulcanici. 8vo. 10 pp. (*Giornale dell' Ital. Letteratura di Da Rio.* v. 38.) *Padova*, 1803

Esame comparativo di alcune ipotesi relative alla Elettricità atmosferica. 4to. (*Giornale Arcadia-Roma.*) *Roma*, 1818

† Saggio di Elettro Magnetismo dedotto dagli esperimenti instituiti nel gabinetto fisico della Università di Roma. 8vo. 74 pp. *Roma*, 1826

Sulla influenza della luce solare nella produzione dei fenomeni Elettrici e Magnetici. 8vo. 16 pp. *Roma*, 1829

Lezioni di Fisica sperimentale. 2 vols. 8vo. (*Biblint. Ital.* lxxxv. 109, *and* lxxxvii. 414.) *Roma*, 1836-37

Fisica sperimentale (*Zantedeschi*, ii. 122.) *Roma*, 1837

Barlocci e Zantedeschi. Congetture sulla origine dell' Elettricità atmosferica (di Barlocci). Corredata di alcune note del . . . F. Zantedeschi. 8vo. 18 pp. *Verona*, 1831

Congetture . . . corredata di note del Zantedeschi . . . Continuazione e fine. 8vo. 14 pp. *Verona*, 1831

Barlow, Jas. (of New York). A new Theory accounting for the dip of the Magnetic Needle; being an analysis of Terrestrial Magnetism. 8vo. *New York*, 1835

† **Barlow,** Peter. *Born October* 13, 1776, *at Norwich.* An Essay on Magnetic Attractions, particularly as respects the deviation of the Compass on shipboard, occasioned by the local influence of the guns, &c., with an easy practical method of observing the same in all parts of the world. 1st edition. 8vo. 145 pp. 1 plate. *London*, 1820

† A curious Electro-magnetic Experiment. 8vo. 2pp. (*Phil. Mag.* lx. 241.) *London*, 1822

† On the anomalous Magnetic Action of Hot Iron between the white and blood-red heat. 8vo. 8 pp. (*Phil. Mag.* lx. 343.) *London*, 1822

† An Account of some Electro-magnetic combinations for exhibiting Thermometric Phenomena, invented by Mr. James Marsh, of Woolwich; with Experiments on the same. 8vo. 7 pp. 1 plate. (*Phil. Mag.* lxii. 321.) *London*, 1823

† An Essay on Magnetic Attractions, and on the Laws of Terrestrial and Electro Magnetism. 2d edition, much enlarged and improved. 8vo. 303 pp. *London*, 1823

† An Essay on Magnetic Attractions; and on the Laws of Terrestrial and Electro Magnetism. With an Appendix, containing the results of Experiments made on shipboard from latitude 61° S. to latitude 80° N. 2nd edition. 8vo. 368 pp. *London*, 1824

Barlow, Peter—*continued.*

† Electro-Magnetism. 4to. 40 pp. and plates. (*Encyclopædia Metropolitana*, iv. 1-40.) *London*, 1824

† On the present situation of the Magnetic Lines of equal variation; and their changes on the terrestrial surface. 4to. (*Phil. Trans.*) *London*, 1833

† Magnetism. (Article of the *Encyclopædia Metropolitana.*)

Encyclopædia of British Arts, Manufactures, &c. 4to. *London*, 1855

† **Barlow**, W. H. On the spontaneous Electrical Currents observed in the wires of the Electric Telegraph. 4to. 12 pp. (*Phil. Trans.* part i. 1849.) *London*, 1849

Barlowe, William. *Born . . . in Pembrokeshire; died* 1625 *in Easton, Winchester.* Magneticall Advertisements. 4to. 1613

Magneticall Advertisements; or, divers Observations concerning the Loadstone. 4to. *London*, 1616

† Magneticall Advertisements; or, Divers pertinent Observations and approved Experiments concerning the nature and properties of the Load-stone. Whereunto is annexed a briefe Discoverie of the idle Animadversions of Mark Ridley, Dr. in Physike, upon this Treatise entituled Magneticall Advertisements. 2d edition, sm. 4to. *London*, 1618

† **Barlowe**, W. and **Sturgeon.** Magnetical Advertisements; or, diverse pertinent Observations and approved Experiments concerning the nature and property of the Loadstone. A new edition, with Notes by W. Sturgeon. *London*, 1843

Barnes, Robt. The use of Galvanism in Obstetric practice. 8vo. (*Lancet*, 1853, vol. ii. No. xxii. 456.) (*London*, 1853

Barneveld, William van. *Born January* 20, 1747, *at Hattem; died June* 23, 1826, *at Hattem.*

Het onweersvuur in zyne en rigting en uitwerkels nagespoort mit de elektrische Stoffen vergeleken, etc. (*Poggendorff*, i. 104.) *Amsterdam*, 1780

Geneeskundige Electriciteit, iii. stukken. (*From Guitard.*) *Amsterdam*, 1785

Medicinische Elektricität. 8vo. *Leipzig*, 1787

† **Baronio**, Gio. Saggio di naturali Osservazioni sulla Elettricità Voltiana, colla descrizione d'una nuova macchina a corona di persone e di un piliere tutto vegetabile. 8vo. 144 pp. *Milano*, 1806

† **Baronio**, Jos. Description of a Galvanic Pile formed of vegetable materials only. 8vo. 2 pp. (*Phil. Mag.* xxiii. 283.) *London*, 1806

Barrington, Daines. *Born* 1727; *died March* 11, 1800, *in London.*

Anglo-Saxon version of the Historiæ of Orosius, by Alfred the Great, with an English translation' from the Anglo-Saxon, containing Accounts of Wars, Plagues, &c., Thunder and Lightnings, &c., from the Creation to A.D. 416. 8vo. *London*, 1773

Bartaloni, D. Lettera sopra il fulmine caduto nel dì 18 Ap. 1777, sulla spranga posta nella torre del palazzo pubblico della città di Siena. 8vo. (*There is also an English translation of the above.*) *Siena*, 1777

† Mem. sul conduttore Elettrico collocato nella torre della Piazza di Siena. 4to. 36 pp. 1 plate. (*Atti dell' Accad. di Siena*, vi. 253. 1781.) *Siena*, 1781

Relazione sopra un supposto Fulmine caduto nella Cappella della Piazza di Siena il dì 7 Giugno dell' Anno 1784. 4to. 8 pp. (*Atti dell' Accad. di Siena*, vii. 61.) *Siena*, 1794

† **Barth**, Johann Matthäus. *Died after* 1751.

De rariori quodam phænomeno cum terræ motu conjuncto, Ratisbonæ observato. 4to. (*Acta Acad. Nat. Curios.* iv. 491.) *Norimbergæ*

† De luce Barometrorum ut et aliis connexis argumentis, Epistola. 4to. 70 pp. *Lipsiæ*, 1716

Bartholinus, Thomas. *Born October* 20, 1616, *at Kopenhagen; died December* 4, 1680, *at Hagestad.* (*Poggendorff*, i. 109.)

Bartholinus—*continued.*

† De luce animalium, lib. iii. admirandis historiis rationibusque novis referti. small 8vo. 396 pp. *Lugd. Batav.* 1647

De luce hominum et brutorum, libri iii. novis rationibus et raris historiis secundum illustrati. 12mo. *Hafniæ*, 1659

De naturæ mirabilibus, questiones academicæ. 4to. *Hafniæ*, 1674

Barton, Sir John. Invented a floating Compass (schwimmenden Compass).

† **Barton,** B. S. On Meteoric Stones. Extr. from Valentia M. B. in the Epimenides Naturæ Curiosorum, Crystallus inter grandines e nubibus decidens, Anno 1724. 8vo. 2 pp. (*Phil. Mag.* xlvi. 154.) *London*, 1815

† **Bary,** Emile Louis François. *Born January* 13, 1799, *at Paris.*

Statique appliquée au Magnétisme. Note sur la manière de corriger .... Boussoles. 8vo. 8 pp. 1 plate. (*Nouv. Ann. de Mathémat. Juin* 1844.) *Paris*, 1844

Basevi, Emile. Sulla Conducibilità Elettrica del Vetro ridotto in fili o lamine. *Pisa*, 1841

Basilius. (*Vide* Sinner-Basilius.)

Basin. (*Vide* Anon. Magnetism, 1753.)

Basle. Acta Helvetica Physico-mathematico-botanico-medica. 8 vols. 4to. *Basel*, 1751-77

Nova Acta ... 1 vol. 4to. 1787

Basse, F. H. Galvanische Versuche und Betrachtungen, die Leitung des galvanisch-elektrischen Fluidums, betreffend; angestellt mit einer Voltaischen Säule aus 70 zweizölligen Metallplatten-Paaren von Kupfer und Zink. 8vo. (*Gilbert's Ann.* xiv. 26-37.) *Leipzig*, 1804

* **Battagia.** Delle Accademie Veneziane. Dissertazione storica. 8vo. 136 pp. *Venezia*, 1826

† **Baudouin,** F. M. Observations sur le mode d'établissement des lignes Télégraphiques sous-marines. 8vo. 31 pp. *Paris*, 1858

Bauer, Fulgentius. *Born* 1731; *died March* 3, 1805, *at Vienna.*

Dissertatio experimentalis de Electricitatis theoria et usu, quam in Disputatione defendit. L. B. Pongraz. 4to. (*Pogg.* i. 115, *says* 1764.) *Viennæ*, 1762

† **Bauer, Marherr, und Kirchvogel.** Experimental Abhandlung von der Theorie und dem Nutzen der Electricität. Von F. Bauer. (Aus dem Latinis von L.D.)

Abhandlung von der Wirkung der Luft-Elektricität in dem menschlichen Körper. Von P. A. Marherr. (Aus dem Latinis von L.D.)

Abhandlung von der Wirkung der Luft-Elektricität in dem menschlichen Körper. Von A. B. Kirchvogel. (Aus dem Latinis von L.D.) 8vo. *Chur. and Lindau*, 1770

Baumé, Antoine. *Born February* 26, 1728, *at Senlis; died October* 15, 1804, *at Paris.* Chymie expérimentale, &c. 3 vols. 8vo. *Paris*, 1773

Baumer, Johan Wilhelm. *Born September* 10, 1719, *at Rehweiler, Frank.; died August* 4, 1788, *at Giessen.*

Progr. de Electricitatis effectibus in corpore animali. 4to. *Erfurth*, 1755

Baumes. Réflexions sur le Galvanisme. (*Journal de Médecine, ou Annales de la Soc. de Méd. pratique de Montpellier, Germinal, an.* xi. No. iii.) *Montpellier*, 1803

Baumgartner, Andreas. *Born November* 28, 1793, *at Friedberg, Bohm.*

Die Naturlehre, &c. *Wien*, 1823

Anfangsgründe der Naturlehre. 3 Auflagen. (*Poggendorff*, i. 118.) *Wien*, 1837

Grundrisz der Naturlehre. 1 und 2 Lfg. 8vo. *Wien*, 1851-52

Anfangsgründe der Naturlehre. 4th edition, enlarged. 8vo. 388 pp. *Wien*, 1851

Anfangsgründe der Naturlehre. 5. vermehrte Auflage. 8vo. 192 pp. *Wien*, 1852

Baumgartner—*continued.*

Anfangsgründe der Naturlehre. 6te. durchaus umgearbeitete und vermehrte Auflage. 8vo. 242 pp. *Wien*, 1855

4 Abhandlungen über Gewitter. 8vo. (*Wien Akad.*) *Wien*

Trattato di Fisica. (*Zantedeschi*, ii. 190.) *Padova*

Ueber die Wirkungen der natürlichen Elektricität auf elektromagnetische Telegraphen. 8vo. (*Sitzungsber. der Wien Akad. Klasse* i. 270.) *Wien*, 1849

† Weitere Versuche über den elektrischen Leitungswiderstand der Erde. 8vo. (*Sitzungsbuch der Königlichen Akad.* 1849, v. *und* vi. *Heft*, p. 28.) *Wien*, 1849

† Nachtrag zu meinem Aufsatz. Von der Umwandlung der Wärme in Elektricität. 8vo. 6 pp. (*Sitzungsberichte . . . der Kais. Akad. der Wissen.* xxxii.) *Wien*

Ueber die Leitkraft der Erde für Electricität. (*Sitzungsberichte der Wien Akad.* ii. 28.) *Wien*

Vide also Ettingshausen und Baumgartner.

† **Baumgartner e Zambra.** Elementi di Fisica di A. Baumgartner. Traduzione e Continuazione di B. Zambra. 8vo. 296 and 189 pp. *Vienna*, 1858

† **Baumgartner,** A. Freih. Ueber Gewitter überhaupt, Hagelwetter insbesondere. 8vo. 26 pp. (*Sitzungsberichte*, 1857, *der Kaiserl. Akad. der Wissenschaften*, xxiii.) *Wien*, 1857

† Von der Umwandlung der Wärme in Elektricität. Sitzung 13 Nov. 1856. 8vo. 12 pp. *Wien*, 1857

Baumhauer, Eduard Heinrich. *Born September* 18, 1820, *at Brüssel.*

De ortu lapidum Meteoricum. 8vo. *Trajecti*, 1844

Bavarian Academy. Abhandlungen der kurfürstl. Baierschen Akademie der Wissenschaften. 4to. *München*, 1764-76

Neue philosoph. Abhandlung. 4to. *Avgsb. und Nürnb.* 1779-97

Denkschriften der Kön. Akad. der Wissenschaften zu München. 4to. 1808, 1832

Abhandlungen der kurfürst. Baierschen Akad. der Wissenschaften, historischen und philosophischen Inhalts. 10 Bde. 4to. *München*, 1763-76

Neue philosoph. Abhandlungen der Baierschen Akad. der Wissenschaften. 7 Bde. 4to. *München*, 1778-97

Denkschriften der königl. Akad. der Wissenschaften zu München. 4to. *München*, 1809

Idem für die Jahre 1811 und 1812. 4to. *München*, 1815

Idem für die Jahre 1813-17. 4to. *München*, 1816-20

Denkschriften . . . für die Jahre 1823 und 1824. 4to. *Sulzbach*, 1825

Note.—This collection seems to have been continued under the same title, with various intervals and modifications, down to the present time [1866]; but the difficulty of obtaining correct dates, &c. from Heinsius is too great (or impossible.) Other authorities must be consulted.

† **Baxter,** H. F. An Experimental Enquiry, undertaken with a view of ascertaining whether any and what signs of current electricity are manifested during the organic process of secretion in living animals; being an attempt to apply some of the discoveries of Faraday to physiology. 4to. (*Phil. Trans.* 1848, p. 243.) (*Faraday's copy.*) *London*, 1848

† **Bazin,** Gilles Augustin. *Born . . . in Paris; died March*, 1754.

Description des Courants Magnétiques dessinés et gravés d'après la nature; suivies de quelques observations sur l'Aimant, par * * * 4to. 52 pp. *Strasbourg*, 1753

† Supplément pour la Description des Courants Magnétiques. 4to. *Strasbourg*, 1754

† **Beardmore,** S. Terra-Voltaism. Remarks on the Application of a Terra-voltaic Couple to Submarine Telegraphs. 8vo. 51 pp. *London*, 1860

Beardmore—*continued.*

† The Globe Telegraph. An Essay on the Use of the Earth for the Transmission of Electric Signals. 8vo. *London*, 1859

Beatson. On Shocks and Tones produced when the passage of the Current of the Spiral is renewed at very small intervals of time. pp. 242. (*Vide* Matteucci.)

† **Beauchamp,** Lord. An Account of the Fire-ball seen in the Air, and of the Explosion heard on December 11, 1741, by Lord B. 4to. 2 pp. (*Phil. Trans.* xli. 870-71.) *London*, 1839-41

(*Vide* also Fuller.)

† **Beaufoy,** Mark. Variation of the Magnetic Needle. Observations near Stanmore. Correction of Error. 8vo. (*Phil. Mag.* liii. 387.) *London*, 1819

† Variation of the Magnetic Needle. 8vo. (*Phil. Mag.* lv. 394.) *London*, 1820

Beaume. (*Vide* La Beaume.)

† **Beaumont-Brivasac.** Electro-Magnetism, Animal. 8vo. 23 pp. *Grenoble*, 1861

Beccari, Jacopo Bartolomeo. *Born July* 25, 1682, *at Bologna; died January* 18, 1767, *at Bologna.* Auroræ Borealis maximæ, anno 1726, ad xiv. Kal. Nov. descriptio. 4to. (*Comment. Bononienses*, tom. i. c. p. 288.) *Bononiæ*, 1731

† De quamplurimis phosphoris nunc primum detectis. Commentarius. 4to. 85 pp. *Bononiæ*, 1744

† De quamplurimis phosphoris nunc primum detectis. Commentarius (primus). 4to. 44 pp. (*Comment. de Bonon. Scient. Instit.* tom. ii. parte ii. p. 136.) *Bononiæ*, 1746

† De quamplurimis phosphoris nunc primum detectis. Commentarius. 4to. 22 pp. (*Comment. de Bonon. Scient. Instit.* tom. ii. parte iii. p. 498.) *Bononiæ*, 1747

† Commentarii duo, de phosphoris naturalibus (ex actis Bononiensibus excerpti.) 8vo. 113 pp. *Graesii*, 1768

Electricitas vindex experimentis atque observ. stabilita. 8vo. *Grätz*, 1773

† De artificiali electricitate ex Benj. Franklini theoria, quam confirmavit, expolivit, auxitque. 4to. 15 pp. *Torino, n. d.*

De electricitate communi. 4to. (*Comment. Bononienses*, iv. p. 88.) *Bononiæ*

Beccari, J. B., et Bonzi. De vi, quam ipsa per se Lux habet, non colores modo, sed etiam texturam rerum salvis coloribus, immutandi. 4to. (*Comment. Bononienses*, iv. c. p. 74.) *Bononiæ*

Beccaria, Giovanni Battista. *Born October* 3, 1716, *at Mondovi; died May* 27, 1781, *at Turin.*

† Dell' elettricismo artificiale e naturale. Libri due. 4to. *Torino*, 1753

Giunta al primo libro della Elettricità naturale. 4to. *Torino*, 1753

† Lettre sur l'Electricité, addressée à Nollet. Traduite de l'Italien par De Lor. 12mo. (This is a translation of Beccaria's *Lettera al Nollet*, inserted at p. 144 of his *Dell' Elettricismo artificiale e naturale.* 4to. *Torino*, 1753.) *Paris*, 1754

† Scientiarum Academicis Londinensibus atque Bononiensibus. (*Questa lettera fu, dallo stesso autore soppressa. Vide* Èandi Vita*** di Beccaria, p. 154.) *Taurini*, 1756

† Dell' Elettricismo. Lettere di G. Beccaria, dirette all' Ch. Sig. G. B. Beccari, coll' Appendice di un nuovo Fosforo descritto all' illust. Sig. Conte Ponte di Scarnafigi . . . Fol. 378 pp. *Bologna*, 1758

Experiments in Electricity. 4to. (*Phil. Trans.* 1760, p. 514.) *London*, 1760

† (Lettera) a sua Altezza Reale il Sig. Duca di York. Sperienze, ed Osservazioni. 4to. 16 pp.

(*Note.* On the Action of the Electric Spark and Lightning on Air; on the Magnetic Direction given to Bodies by Lightning, &c.) *Torino*, 1764

Beccaria—*continued.*

Novorum quorumdam in re electrica experimentorum specimen, quod Regiæ Londinensi Societati mittebat die 26 Aprilis, 1766. T. B. B. . . . Fol. (*Letto alla Soc. Reale di Londra*, il 4 Giugno, 1767, ed inserito nelle *Transaz. di quell' anno*, lvii. p. 297.) *Taurini*, 1766

† Novorum quorumdam in re electrica experimentorum specimen quod Regiæ Londinensi Societati mittebat die 14 Jan. anno 1766. T. B. B. Fol. 4 pp. (*Phil. Trans.* 1766. lvi. 105.) *Taurini*, 1766

A Paper on the Pekin Experiments. 4to. (*Phil. Trans.*) *London*, 1766 *or* 1767

† De electricitate vindice ad B. Franklinium . . . Epistola (date 20 February.) Fol. *Taurini*, 1767

Note.—The letter to which he refers, addressed to Franklin, was never printed.

† Experimenta atque Observationes quibus electricitas vindex late constituitur et explicatur. 4to. 1 plate. 66 pp. *Taurini*, 1769

† De atmosphæra electrica. Ad Regiam Londinensem Societatem libellus. Fol. 7 pp. (*Phil. Trans.* 1770. lx. 277.) *Taurini*, 1769

† Elettricismo artificiale (al Duca di Chablis). 4to. 439 pp. and plates. *Torino*, 1772

† Della elettricità terrestre atmosferica a cielo sereno, Osservazioni. 4to. (Dedicate a sua Alt. Rle. il Sig. Principe di Piemonte.) 54 pp. *Torino*, 1775

† A Treatise upon Artificial Electricity, in which are given Solutions of a number of interesting Electric Phenomena hitherto unexplained. To which is added an Essay on the mild and slow Electricity which prevails in the Atmosphere during serene weather. (Translated from the original Italian of Father Giambattista Beccaria.) 4to. 457 pp. 11 plates. *London*, 1776

† Articolo di Lettera . . . al Landriani sullo spezzamento de' vetri nell' atto della scarica, e sopra un nuovo Elettrometro. 12mo. 7 pp. (Date, Torino, 25 Dec. 1775.) *Milano*, 1776

† Occhiale elettrico per ispiare la luce nella scossa della Torpedine. 12mo. 5 pp. (*Scelta d' Opuscoli*, xix. 87.) *Milano*, 1776

† Lettera al Sig. Le Roy, sulle Stelle-cadenti. 12 mo. 12 pp. (*Says that a falling star struck his kite. So also in his letter to Beccari*, p. 110, &c. *Scelta d' Opuscoli*, xxi. 86.) *Milano*, 1776

† Articolo di lettera . . . intorno a due nuovi punti di analogia del Magnetismo indotto dal Fulmine ne' Mattoni e nelle Pietre ferrigne. 12mo. 5 pp. (*Scelta d' Opuscoli*, xxxii. 40.) *Milano*, 1777

† Lettera al Fromond sul cangiamento di colore prodotto dal fuoco. 4to. 5 pp. (*Opuscoli Scelti*, ii. 378.) *Milano*, 1779

† Poscritta alla Lettera al Fromond. 4to. 4 pp. *Milano*, 1779

† Articolo d' altra Lettera. 4to. 1 pp. *Milano*, 1779

† De' Fiori elettrici. Lettera al Cavallo. 4to. 7 pp. (*Opuscoli Scelti*, iii. 243.) *Milano*, 1780

† Lettera al . . . Priestley . . . intorno all' azione dal fuoco elettrico sulle calci metalliche. 4to. 6 pp. (*Opuscoli Scelti*, iii. 377.) *Milano*, 1780

† Descrizione di un suo nuovo disegnatore del Fulmine (Cerannografo). 8vo. 20 pp. 1780 (?)

† Nuovi sperimenti per confermare ed estendere la meccanica del fuoco elettrico. 4to. 19 pp. *Torino*, 1780

† Articolo di lettera all' Amoretti sulla luce delle Lagrime Britanniche. 4to. Dated Torino, 16 Agosto, 1780. Original. (*Opuscoli Scelti*, iii. ~~264.~~ 274.) *Milano*, 1780

† *Vide* his Letter to Fromond, dated Torino, 27 Genna. 1754, describing his Experiments, intended to prove that Electric Motions do not occur *in vacuo*. 4to. (Contained in Bianchi's *Elogio di Fromond*, p. 42.) *Cremona*, 1781

Elogio di Beccaria, di Tana. 8vo. (printed on vellum). *Torino*, 1781

Beccaria—*continued.*

Al Sig. Conte Cotti di Brusasco per la laurea . . . . Intorno alla naturalezza della cagione efficiente de' Temporali, e de' fenomeni compagni. 8vo. *Torino*, 1781

† Memorie istoriche intorno agli studii del Padre Giambattista Beccaria (di Eandi, G. A.) 8vo. 116 pp *Torino*, 1783

(*Note.—The edited works are named in order of their dates. The unedited comprise very many works on* Thunder Conductors, St. Elmo Fire, Auroræ, Electricitas-vindex, &c.)

† Dell' elettricismo. Opere del Beccaria con molte note nuovamente illustrate. 2 vols. 4to. *Macerata*, 1793

A Letter or Dissertation to Count San Martino della Motta on Earthquakes (in which he refers to his works of 1753 and 1758.) 1793

Letter to the Princess Giuseppina di Carignano, on the Electricity of the Moon. 1793

Elogio del P. Beccaria (Anonymous). 8vo. (*From Opus. Scelti*, v. 19.) *Torino*

† Notizia storica di Giambattista Beccaria, scritta da A. M. Vassalli Eandi. 8vo. 22 pp. (*Lo Spettatore*, tom. v. p. 101.) *Milano*, 1816

(*Note.*—He left in the hands of Count Balbo fourteen Letters on Lightning, and one, "su i Baleni a caldo," *ready for printing;* also another, not quite completed, on Auroræ Boreales; beside "un' infinità d'altri lavori non meno importanti, e degni tutti *nello stato in cui sono* d'essere donati al pubblico." These consist of Observations of the Effects of Lightning, Papers on Zodiacal Light, on Marine Waterspouts, on St. Elmo Fire, on the Effect of the Stroke of Lightning on the Tower at Siena, "sulla maniera di preservare gli edifizii dai Fulmini e specialmente i magazzini della polvere," and of Two Journals of Observations, one of Atmospheric Electricity, the other of Earthquakes and Atmospheric Electricity.)

(*N.B.* Sons and other relations of Count Balbo were recently living at Turin.)

† Portrait. Vercel del. Fiori sculp.

Becher, A. B. La aguja de las tormentas, ó sea Manual sobre huracanes para uso del navegante. Con la teoria de los huracanes puesta al alcance de todos. Puesto en castellano por D. Miguel Lobo. Con un apéndice que contiene el uso de la rosa transparente de Talco, tomada de la obra de Mr. Piddington. 8vo. 96 pp. *Barcelona*, 1856

Beck, Dominicus. *Born September 27, 1732, at Oepfingen b. Ulm; died February 22, 1791, at Salzburg.*

Beschreibung einer elektrischen Flinte. (*Pogg.* i. 125.) *Salzburg*, 1780

Fassliche Unterredung, Gebäude vor dem Einschlagen des Blitzes zu bewahren. 8vo. (*Heinsius*, i. 210.) *Salzburg*, 1786

† Kurzer Entwurf der Lehre von der Elektricität . . 8vo. 196 pp. *Salzburg*, 1787

Beckensteiner, C. Electrodoreur. 1841

† Etudes sur l'Electricité. Organes électriques chez l'Homme, ou corpuscules de Pacini, par les Drs. Heule et Kœlliker. Précédées d'Observations sur l'Electricité Animale. 8vo. 1re livraison. 72 pp. *Paris and Lyon*, 1847

† Etudes sur l'Electricité. Nouvelle Méthode pour son emploi médical. 8vo. 340 pp. *Paris*, 1852

† Etudes sur l'Electricité. Traitement de l'Epilepsie par l'Electricité statique. Nouvelle Méthode. 8vo. 80 pp. 1 plate. Extrait du tom. iii. 1re livraison. *Paris, Lyon, Leipzig*, 1859

† Etudes sur l'Electricité. Nouvelle Méthode pour son emploi médical. Traitement de l'Epilepsie; Traitement de la Chorée, ou Danse de St. Guy, &c. 3 vols. 8vo. 2nd edition. *Paris*, 1859-60

† Etudes sur l'Electricité. Traitement de la Chorée, ou Danse de St. Guy, par l'Electricité statique. Extrait du tom. iii. 8vo. 30 pp. 2me livraison. *Paris, Lyon, Leipzig*, 1860

Beckensteiner—*continued.*

† Etudes sur l'Electricité. Nouvelle Méthode pour son emploi médical. Tom. ii. 8vo. 320 pp. *Paris*, 1870

Becker, Christian August. *Born August* 24, 1792, *at Mühlhausen.*

Der mineralische Magnetismus . . . Heilkunst. 8vo. 202 pp. *Mülhausen*, 1829

† **Becket**, J. B. An Essay on Electricity, containing a Series of Experiments introductory to the study of that Science, in which are included some of the latest Discoveries, intended chiefly with a view of facilitating its application and extending its utility in Medical Purposes. 8vo. 151 pp. *Bristol*, 1773

Beckmann, Johann. *Born June* 4, 1739, *at Hoya; died February* 3, 1811, *at Göttingen.*

Physikal-ökonomische Bibliothek. 23 vols. 8vo. (jede bd. in 4 st.) *Gottemburg*, 1770-1807

Beitrüge zur Geschichte der Erfindungskunst. 8vo. 5 bde. zu 4 stck. (*Poggendorff*, i. 127, *says* 1784-1805.) *Leipzig*, 1780-1805

Geschichte der Erfindungen. 8vo. 2nd edit. (*From Ezleben*, 489.) *Leipzig*, 1783

History of Inventions and Discoveries. 3 vols. 8vo. *London*

History of Inventions and Discoveries. Translated by Johnson. 4 vols. 8vo. 1814

Becquerel, Antoine Cesar. *Born March* 8, 1788, *at Chatillon-sur-Loing, département du Loiret; died January* 18, 1878, *Paris.*

Expériences sur le Développement de l'Electricité par la Pression. Lois du Développement. 8vo. (*Poggendorff says Ann. Chim.* 1823, vol. xxii.) *Paris*, 1823

† Experiments on the Development of Electricity by Pressure. Laws of this Development. Continuation. 8vo. 12 and 8 pp. (*From Ann. de Chim.* xxii. 5. *Vide also Phil. Mag.* lxii. 204 and 263.) *London*, 1823

† Du Développement de l'Electricité par le Contact de deux Portions d'un même Métal . . 8vo. 20 pp. (*Lu à l'Acad.* 16 *Juin*, 1823; *Ann. de Chim.* xxiii. 1823.) *Paris*, 1823

† Des Effets Electriques qui se développent pendant diverses Actions Chimiques. 8vo. 13 pp. (*Lu à l'Acad.* 7 *Juin*, 1823; *Ann. de Chim.* xxiv. 1823.) *Paris*, 1823

Des Actions Magnétiques (ou . . . analogues) produites dans tous les Corps par l'Influence de Courants Electriques très énergiques. 8vo. 9 pp. (*Lu à l'Acad.* 1 *Mars*, 1824; *Ann. de Chim.* xxv. 1824.) *Paris*, 1824

† Mémoire sur les Décompositions Chimiques opérées avec des Forces Electriques à très-petite tension. 4to. 11 pp. (*Lu le* 21 *Août*, 1826; *Mém. de l'Acad.* xi. 33.) *Paris*, 18—

† Mémoire sur les Actions Magnétiques excitées dans tous les Corps par l'Influence d'Aimants très-énergiques. 4to. 13 pp. (*Lu le* 17 *Septembre*, 1827; *Mém. de l'Acad.* xi. 45.) *Paris*, 18—

Mémoire sur l'Electro-chimie et l'emploi de l'Electricité pour opérer des Combinaisons. 8vo. 40 pp. (*Ann. de Chim.* xli. 15.) *Paris*, 1829

Mémoire sur le Pouvoir Thermo-électrique des Métaux. 4to. 21 pp. (*Lu* 3 *Août*, 1829, *à l'Acad.*; *Paris Acad.* 1829.) *Paris*, 1829

Mémoire sur les Sulfures, Iodures, Bromures, &c., métalliques. 4to. 12 pp. (*Acad. Paris.*) *Paris*, 1829

Mémoire sur de Nouveaux Effets Electro-chimiques propres à produire des Combinaisons, et sur leur Application à la Cristallisation du Soufre et d'autres Substances. 4to. 15 pp. (*Lu à l'Acad.* 25 *Janv.* 1830; *Acad. Paris.*) *Paris*, 1830 ?

Mémoire sur un Procédé Electro-chimique pour retirer le Manganèse et le Plomb des Dissolutions dans lesquelles ils se trouvent. 4to. 7 pp. (*Lu à l'Acad.* 3 *Mai*, 1830; *Acad. de Paris.*) *Paris*

† Decomposition of Sulphuret of Carbon by Electricity. 8vo. (*Phil. Mag. or Annals*, vii. 61; *Ann. de Chim. Sept.* 1829.) *London*, 1830

Becquerel, A. C.—*continued.*

† Considérations générales sur les Décompositions Electro-chimiques, et la Réduction de l'Oxide de Fer, de la Zircone et de la Magnésie, à l'aide de Forces Electriques peu considérables. 4to. 11 pp. (*Mém. de l'Acad.* tom. xii. p. 581.) *Paris*, 1833

† Traité Expérimental de l'Electricité et du Magnétisme, et de leurs Rapports avec les Phénomènes Naturels. 8vo. tom. i. and ii. *Paris*, 1834

Résultat d'un Voyage fait en Suisse, en Piémont, et en Italie, avec M. Brachet. Expériences sur le Magnétisme Terrestre . . sur l'Electricité atmosphérique, sur la Commotion Electrique de la Torpille, &c. 4to. (*Comptes Rendus*, i. 242.) *Paris*, 1835

† Traité Expérimental de l'Electricité et du Magnétisme. 1 vol. 8vo. tom. iii. 450 pp. *Paris*, 1835

† Traité Expérimental de l'Electricité et du Magnétisme. 1 vol. 8vo. tom. iv. 333 pp. *Paris*, 1836

Rapport sur divers Mémoires de M. Matteucci concernant l'Electricité Animale en général, et particulièrement les Phénomènes de la Torpille. 4to. (*Comptes Rendus*, v. 788.) *Paris*, 1837

† De quelques Propriétés nouvelles relatives au Pouvoir Phosphorescent de la Lumière Electrique. 4to. 7 pp. (*Comptes Rendus*, viii. No. 7.) *Paris*, 1839

† Traité Expérimental de l'Electricité et du Magnétisme. 8vo. Tom. v. is in 2 parts. First part, dated 1837, 316 pp. 2 plates; second part, dated 1840, 288 pp. 5 plates. *Paris*, 1837-40

† Traité Expérimental de l'Electricité et du Magnétisme. Tom vi. in 2 parts. First part, dated 1840, 440 pp. 5 plates; second part, dated 1840, 547 pp. 18 plates. *Paris*, 1840

† Traité Expérimental de l'Electricité et du Magnétisme. Fol. Atlas pour la 2e partie du 5e vol. et le 6e et le 7e vol. *Paris*, 1840

† Traité de Physique considerée dans ses Rapports avec la Chimie et les Sciences Naturelles. 8vo. tom. i. 544 pp. *Paris*, 1842

† Eléments d'Electro-chimie appliquée aux Sciences Naturelles et aux Arts. 8vo. 419 pp. *Paris*, 1843

† Mémoire sur l'Application Electro-chimique des Oxides et des Métaux sur des Métaux. 8vo. 24 pp. (*Ann. de Chim.* 3me serie, tom. viii. 1843.) *Paris*, 1843

† Traité de Physique considerée dans ses Rapports avec la Chimie et les Sciences Naturelles. Tom. ii. 651 pp. 7 plates. *Paris*, 1844

† Traité de Physique dans ses Rapports avec la Chimie et les Sciences Naturelles. 2 vols. 8vo. *Paris*, 1844

† Elemente der Electro-Chemie in ihrer Anwendung auf die Naturwissenschaften und die Künste. Aus dem Französischen. 8vo. 488 pp. 3 plates. *Erfurth*, 1845

† De la Polarité produite par les Décharges Electriques, et de son emploi pour la détermination de la quantité d'Electricité ordinaire associée aux Parties constituantes des Corps dans les Combinaisons. 4to. 24 pp. (*Comptes Rendus*, 1846, 1e serie, xxii. No. 10, p. 381.) *Paris*, 1846

Recherches sur les Causes de l'Electricité atmosphèrique et terrestre, et sur les Effets Chimiques produits en vertu d'Actions lentes avec ou sans le Concours de Forces Electriques. 4to. 145 pp. (*Extrait des Mémoires de l'Académie des Sciences*, tome xxvii. 2e partie.) *Paris*, 1859

† Considérations générales sur la Théorie Electro-chimique. 4to. 6 pp. (*Comptes Rendus*, 1849, 1e série, xxviii. No. 22, p. 658.) *Paris*, 1849

Recherches sur la Température de l'Air, au Nord, au Midi, loin et près des Arbres. Suivi de : Note sur la Psychrométrie électrique ; nouveau Mémoire sur la coloration électro-chimique et le Dépôt de Peroxyde de Fer sur des lames de Fer et de Cuivre ; et Mémoire sur la Production électrique de la Silice et de l'Alumine. 4to. 205 pp. *Paris*, 1863

Becquerel, A. C.—*continued.*

Le Dégagement de l'Electricité dans les Actions Chimiques. 8vo. *Paris*, 1854

† Sur la Conservation du Fer et de la Fonte dans l'Eau douce. 4to. 8 pp. (*Ext. des Comptes Rendus*, lix. 31 Oct. 1864.) *Paris*, 1864

† Eléments d'Electro-chimie appliquée aux Sciences Naturelles et aux Arts. 8vo. 626 pp. Deuxième édition, entièrement refondue. *Paris*, 1864

† **Becquerel et Brachet.** Lettre concernant des Expériences sur la Torpille faites en commun avec M. Brachet. 4to. (*Comptes Rendus*, iii. 135.) *Paris*, 1836

† **Becquerel**, A. C., et **Becquerel**, Ed. Eléments de Physique Terrestre et de Météorologie. 8vo. 706 pp. *Paris*, 1847

† Traité d'Electricité . . . Tome troisième, Magnétisme et Electro-magnétisme. 8vo. 412 pp. (*N.B. There are two plates, numbered* 6—*viz.* 6 *and* 6 *bis.*) *Paris*, 1856

† Traité d'Electricité et de Magnétisme et des Applications de ces Sciences à la Chimie, à la Physiologie, et aux Arts. Tome premier, Electricité. Principes généraux. 8vo. 456 pp. *Paris*, 1855

† Traité d'Electricité et de Magnétisme, et des Applications de ces Sciences à la Chimie, à la Physiologie, et aux Arts. Tome deuxième. Electro-chimie. 8vo. 475 pp. *Paris*, 1855

† Résumé de l'Histoire de l'Electricité et du Magnétisme, et des Applications de ces Sciences. 8vo. 300 pp. *Paris*, 1858
(*Note. Very imperfect lists of authors are annexed.*)

† **Becquerel, Biot,** et **Becquerel**, Ed. Mémoires sur la Phosphorescence par la Lumière Electrique. 4to. 27 pp. (*Archives du Muséum d'Histoire Naturelle*, tom. i.) *Paris*, 1839

Becquerel, Ad. Des Applications de l'Electricité à la Pathologie. 8vo. 52 pp. *Paris*, 1856

† Application de l'Electricité à la Thérapeutique. 1st edition. (?) *Paris*, 1857

† Traité des Applications de l'Electricité à la Thérapeutique Médicale et Chirurgicale. Deuxième édition. Revue, &c., et augmentée. 8vo. 550 pp. *Paris*, 1860

Becquerel, Edmond. *Born March* 24, 1820, *at Paris.* (*Vide* also Becquerel, A. C.)

† Des Effets Chimiques et Electriques produits sous l'Influence de la Lumière Solaire. Thèse présentée à la Faculté des Sciences, Paris, Août, 1840. 4to. 49 pp. *Paris*, 1840

Die Dagerotypie und Photographie in einer Sekunde. Aus dem Franz, nebst Bemerkungen über die Galvanotypie . . Uebersetzt von Oger. 12mo. *Aachen*, 1841

† Des Lois du Dégagement de la Chaleur pendant le Passage des Courants Electriques à travers les Corps solides et liquides. 8vo. 52 pp. (*Ext. des Archives de l'Electricité de Genève.*) 1843

† Note sur l'Action du Magnétisme sur tous les Corps. 4to. 10 pp. (*Comptes Rendus*, 1846, 1e série, xxii. No. 23, p. 952.) *Paris*, 1846

† Recherches sur la Transmission de l'Electricité à travers des Gaz à des Températures élevées. Mémoire présenté à l'Acad. le 4 Juillet, 1853. (*Extrait des Ann. de Chim. et de Phys.* 3e série, xxxix.) 8vo. 48 pp. *Paris*, 18—

Recherches sur le Dégagement de l'Electricité dans les Piles Voltaïques. 1e partie, Force Electromotrice. 2e partie, Résistance à la Conductibilité. 3e partie, Puissance Chimique des Piles, Evaluation de leur Dépense. 8vo. 96 pp. (*Ext. du Cat. Lacroix à Liège*, p. 3. The 2nd and 3rd parts are probably also in the *Annales de Chimie.*) *Paris*, 1856

† Notice sur les Travaux Scientifiques de M. Ed. Becquerel. 4to. *Paris*, 1859

† Etudes sur la Conductibilité des Liquides dans les Tubes Capillaires, Rhéostat destiné à la Comparaison des grandes Résistances. 8vo. 24 pp. (*Ann. du Conservat. des Arts et Métiers*, Avril, 1861.) *Paris*, 1861

Becquerel, Edmond—*continued.*

† Effets Lumineux qui résultent de l'Action de la Lumière sur les Corps. Leçon faite le 19 Avril, 1861, à la Société Chimique de Paris. 8vo. 45 pp. *Paris,* 1862

On the Transport of some Salts by Electrical Discharge. (*Comptes Rendus,* June, 1871.) (*From "Athenæum,"* Aug. 12, 1871.) *Paris,* 1871

† Mémoire sur la Conservation du Cuivre et du Fer dans la Mer. 4to. 8 pp. (*Ext. des Comptes Rendus,* lix. *Séance* 4 *Juillet,* 1864.) *Paris,* 1864

De l'Action du Magnétisme sur tous les Corps. 8vo. *Paris,* 1850

† Des Actions Electromotrices de l'Eau et des Liquides . . . sur les Métaux, &c., et des Effets Electriques qui ont lieu—1, dans le Contact de certaines Flammes et des Métaux ; 2, dans la Combustion. 8vo. 15 pp. (*Ann. de Chim.?*) *Paris,* 18—

† Exposé des Phénomènes Electriques qui précèdent et qui suivent les Actions Chimiques. 8vo. 35 pp. (*Ann. de Chim.?*) *Paris*

† Considérations générales sur les Changements qui s'opérent dans l'état électrique des Corps . . . Seconde Partie. 4to. 34 pp. *Paris*

† Considérations générales sur les Changements qui s'opérent dans l'état électrique des Corps . . Troisième Partie. 4to. 12 pp. (*Lu à l'Acad.* 27 Fev. 1832.) *Paris*

† Considérations générales sur les Applications des Sciences Physico-chimiques . . 4to. 12 pp. (*Comptes Rendus de l'Acad.* tom. xi. 16 Juillet, 1840.) *Paris,* 1840

† Mémoire sur l'Application Electro-chimique des Oxides et des Métaux sur les Métaux . . . 4to. 16 pp. (*Comptes Rendus de l'Acad.* 3 Juillet, 1843.) *Paris,* 1843

† Précipitation des Métaux par d'autres Métaux. 4to. 24 pp. (*Comptes Rendus de l'Acad.* tom. xviii. 18 Mars, 1844.) *Paris,* 1844

† Des Courants Electriques Terrestres. 4to. 18 pp. (*Comptes Rendus de l'Acad.* tom. xix. 18 Nov. 1844.) *Paris,* 1844

† Sur les Applications de l'Electro-chimie à l'Etude des Phénomènes de Décompositions et Recompositions terrestres. Premier mémoire. 4to. 28 pp. (*Comptes Rendus de l'Acad.* tom. xx. 26 Mai, 1845.) *Paris,* 1845

† De la Polarité par les Décharges Electriques, &c. 4to. 24 pp. (*Comptes Rendus de l'Acad.* tom. xxii. 9 Mars, 1846.) *Paris,* 1846

† Nouvelles Applications de l'Electricité à la Décomposition des Substances Minérales. 4to. 8 pp. (*Comptes Rendus de l'Acad.* tom. xxii. 13 Mai, 1846.) *Paris,* 1846

† Mémoire sur les Circuits Electro-chimiques simples formés de Liquides. 4to. 12 pp. (*Comptes Rendus de l'Acad.* tom. xxiv. 29 Mars, 1847.) *Paris,* 1847

† Sur les Fils très-fins de Platine et d'Acier ; et sur la Distribution du Magnétisme libre dans ces derniers. 8vo. 20 pp.

(*Vide* also Fremy and Becquerel.)

Beek, A. Van. Ueber das Magnetisiren des Stahls durch Maschinen-Elektricität. (*Gilb. Ann.* 1822. lxxii.) *Leipzig,* 1822

Neue Thermo-elektricität Versuche. 8vo. (*Gilb. Ann.* 1823. lxxiii.) *Leipzig,* 1823

† De l'Influence que le Fer des Vaisseaux exerce sur la Boussole, &c. . . Trad. du Hollandois, par Lipkin. (L . . .) 8vo. 71 pp. *Paris,* 1826

Ueber dauernde Einwirkungen, welche die Eigenschaften eines Metalls noch lange nach dessen Berührung mit einem anderen Metall erleiden. 8vo. (*Pogg. Ann.* xii. 1828.) *Leipzig,* 1828

Over de aanwending der Elektrische vonk, bij het doen van Microscopische nasporingen op snel bewegen ligchamen. (*Tijdschrift voor de wis-u. natuurkundige Wetenschapp,* &c. i. 1848.) 1848

(*Vide* also Moll and Van Beek.)

† **Beer,** Aug. Introduction à l'Electrostatique, à la Théorie du Magnétisme et à l'Electrodynamique. Ouvrage traduit et annoté par G. Vandermensbrugghe . . . d'après l'édition publiée après la mort de l'auteur, par M. Plücker. 8vo. 109 pp. *Paris*, 1868

† Einleitung in die Electrostatik. Die Lehre vom Magnetismus und die Electrodynamik. Nach dem Tode des Verfassers herausgegeben von Julius Plücker. 8vo. 418 pp. *Braunschweig*, 1865

† Electricität als Heilmittel gegen Nervenkrankheiten, Rheumatismen, Gelenksleiden, Drüsenanschwellungen, &c. 8vo. 52 pp. *Wien*, 1868

(*Vide* also Plücker and Beer.)

Beets. (*Vide* Du Bois-Reymond and Beets.)

† **Beetz,** W. von. Ueber die Leitungsfähigkeit für Electricität, welche Isolatoren durch Temperaturerhöhung annehmen. 15 pp. (*Der Königl. Acad. der Wissensch. zu Berlin mitgetheilt.*)

† Ueber Magnetismus. Ein Vortrag gehalten im Wissenschaftlichen Verein am 13 März, 1852. 8vo. 28 pp. *Berlin*, 1852

† **Beggiato,** F. S. Elogio del Fusinieri. (*Vide* Fusinieri.)

Beguelin, Nicolas de. *Born June* 25, 1714, *at Courtlari by Bienne; died Feb.* 3, 1789, *at Berlin.*

Extrait des Observations Météorologiques faites à Berlin pendant l'Année 1770. 4to. (*Nouv. Mém. de Berlin*, an. 1770, p. 75.) *Berlin*, 1770

† **Behn,** F. D. Das Nordlicht von 1770. (*Poggendorff*, i. 135.) *Lubec*, 1770

Beschreibung einiger merkwürdigen Nordlichter, &c. 8vo. 127 pp. *Lubeck*, 1783

Behr, Von. Ueber Elektrische Telegraphen. 4to. *Königsberg*, 1848

Vom Magnetismus und dessen Verhältniss zu den übrigen Naturkräften. 8vo. (*Unterhaltungen Königsberger, Naturwissenschaftliche.* Heft 2.) *Königsberg*, 1851

Behrends, T. G. B. Erfinder des nach ihm (und mehr nach Bohnenberger) benannten Elektrometers, beschreiben in dem Aufsatz. Das Merkwürdigste aus Versuchen über Elektricität. 8vo. (*Gilbert Ann.* 1806, xxiii.) *Leipzig*, 1806

On the Application of Galvanism to discover the reality of Death.

Dissertatio qua demonstratur cor nervis carere. *Mogunt.* 1792

† **Behrmann,** C. Beobacht. über das Sternschnuppen angestellt auf den Sternwarten zu Göttingen und Münster, nebst daraus abgeleiteten Resultaten. 8vo. 49 pp. *Göttingen*, 1866

Beil. Die Anwendung elektromagnetischer Telegraphen für den Dienst der Eisenbahnen. 8vo. *Frankfurt*, 1845

† **Beinert,** C. C. Der Meteorit von Braunau am 14 Juli, 1847. Darstellung, Beschreibung und Analyse. 8vo. 51 pp. *Breslau*, 1848

Belavenetz, J. Captain. A Russian translation of the Admiralty Manual, with Notes. (*Evans and Smith's Admiralty Manual*, 2nd edition, 1863.) 116 pp. *Russia*, 1863

Beldani. Sulla forma, &c. (*Pila.*)

† **Belfield,** Lefevre. Des procédés Galvano plastiques. 8vo. 76 pp. (*Extr. de la Revue Scientifique et Industrielle.*) *Paris*

Belgian Academy. Catalogue des Livres de l'Académie de Belgique. 8vo. (*Gl. I. R. Inst. Lomb. suo. s.* iii. 230.) *Bruxelles*, 1850

† **Belgrado,** Giacomo. *Born November* 16, 1704, *at Udine; died March* 26, 1780, *at Udine.*) I Fenomeni Elettrici con i corollari da loro dedotti, e con i fonti di ciò che rende malagevole la ricerca del principio Elettrico. All' Al. Rle. . . . Don Filippo Borbone, Duca di Parma, &c. 4to. 44 pp. *Parma*, 1749

Belgrado—*continued.*

De phialis vitreis ex minimi silicis casu dissilientibus. 4to. (*Friedlander Cat.* 1869.) *Patavii*, 1743

† **Belknap**, Jeremy. Extract of a Letter from Jeremy Belknap, containing Observations on the Aurora Borealis. Read May 2, 1783. 4to. *Philadelphia*, 1786

Bell. Animal Electricity and Magnetism. 8vo. 1792

Bella, Giovannantonio della. (*Vide* Della Bella.)

† **Bellagatta**, A. Trattamento sopra l'ignea apparenza . . . del 16 Dec. 1737. 12mo. 18 pp. (*Calogera, Raccolta* xvii. 121.) *Venezia*, 1738

Bellani, Angelo. *Born* 1776 *at Monza; died* 1852 *at Milan.*

† Sulla produzione dell' acido muriatico ossigenato colla Pila . . . Lettera al Moscati. 4to. 18 pp. (*Nuova Scelta d'Opuscoli*, i. 307.) *Milano*, 1804

† Osservazioni sopra varii argomenti . . . (Sulle pietre Meteoriche, p. 194.) 8vo. 10 pp. (*Ann. di Chim. di Brugnatelli*, xxii. 189-194.) *Pavia*, 1805

† Nuove sperienze fisico chimiche . . . cogli elettromotori del Bellani . . . al Volta. 12mo. 86 pp. *Milano*, 1806

Difesa della Lettera . . . del . . . Volta al Marzari . . . 8vo. 29 pp. *Milano*, 1823

Su alcuni Fenomeni del vetro e del mercurio. (*Memoranda received on January* 16, 1823, *by the Venetian-Lombardy Institution, but not printed in its Memoirs.*)

† Sopra la questione: se i cloruri metallici decompongono l'acqua. 8vo. 3 pp. (*Articolo* 5 *di Cenni su diversi Argomenti, Poligrafo di Verona di* 1832, x. 330.) *Verona*, 1832

† Dell' anteriorità di una scoperta attribuita a Davy. Nota. Applicazione del ferro alle lamine di Rame che foderano i bastimenti. 4to. 1 p. (*Ann. del Reg. Lomb.-Veneto*, iv. 46.) *Padova*, 1834

† Sopra la questione: se i cloruri metallici decompongono l'acqua, ec. Con Nota dell' Editore (*i. e.* Fusinieri.) 4to. 3pp. (*An. del Reg. Lomb.-Veneto*, iv. 124.) *Padova*, 1834

† Sulla Grandine. Memoria. 4to. 52 pp. (*Estratta dai fasci.* i. *e* ii. *del tomo* ii. *degli Opuscoli Matem. e Fisici.*) *Milano*, 1834

† Article headed, Ai Signori Direttori (on Falling Stars), with Notes by the Editors. 8vo. 8 pp. (*Bibliot. Ital.* lxxxii. 470.) *Milano*, 1836

† Degli Aëroliti delle Pioggie o Nevi rosse e delle Nebbie, o esalazioni secche. Riflessioni. 8vo. 27 pp. (*Estratta dalla Biblio. di Farmacia Chim. &c.*) 1836

† * Delle difficoltà che si oppongono allo stabilimento di Osservatorii meteorologici Discorso. 8vo. (*Ital. Soc. Mem.* xxiii. 9.) *Milano*

† Collettore di calorico, ossia nuovo strumento Meteorologico; inventato e descritto da A. B. 4to. 9 pp. 1 plate. (*Fusinieri's Annali*, vi. 200.) *Milano*, 1836

† Invito alla Riunione . . . di Torino . . . Sulla formazione della Grandine. (*Bibliot. Ital.* xcix. 65.) 8vo. 36 pp. *Milano*, 1840

Rettificazione . . . contro le Osservazioni del . . . Zantedeschi . . . nel bimestre iii. e iv. 1844, degli Annali delle Scienze del Regno Lombardo-Veneto. 8vo. (*Gior. I. R. Ist. Lomb.* xi. 209.) 1845

† Suono reso da un filo metallico teso in pien 'aria. 8vo. (*Gior. I. R. Ist. Lombardo*, xv. 136.) *Milano*, 1846

Opuscoli diversi del . . . A. B. per la Maggiore parte estratti dagli Annali di Agricultura del Regno Lombardo-Veneto. 8vo. (*From Gior. I. R. Ist. Lombardo*, x. 370, 1845.)

Discorso sopra diversi argomenti Fisico-chimici. (*V. Ext.* vi. 63.

(*Vide* also Volta and Bellani.)

Bellavitis, Giusto. *Born* 1803, *at Bassano.* Lettera (di B. . . . He is the Anonimo matematico mentioned by Fusinieri) in risposta a quella che il . . . Fusinieri pubblicò negli Annali delle Scienze del Reg. Lomb.-Ven. Bimestre 2° del 1840, p. 91. 8vo. 13 pp. (*Verona Poligrafo*, iii. 1840, p. 220.) *Verona*, 1840

Sulle correnti Elettriche simultanee, ecc. Sperienze per verificare se vi possono esistere, in un medesimo conduttore, correnti Elettriche simultanee ed opposte. *Note.—Zantedeschi, in his paper, Ueber die Physikal-Studien, &c. der Italiener, im Jahre* 1858, p. 27, *gives a very long title, and says, in Atti dell' I. R. Inst. Veneto*, p. 113-147, 1858.

Bellemare. Système Controleur (télégraphe), présenté à l'Institut, Février, 1856. *Paris*, 1856

Bellevue. (*Vide* Fleurian de Bellevue.)

Belli, Giuseppe. *Born November* 25, 1791, *at Calasca, Piémont; died June* 1, 1860, *at Pavia.*

Sulle induzioni Elettrostatiche. 8vo. (*Nuovo Cimento*, viiii 97, *anno* 1858.) *Torino*, 1858

* Di un nuovo Psicrometro o Igrometro a raffreddamento per evaporazione. Memoria. 4vo. 33 pp. (*Nuovi Saggi dell' Accad. di Padova*, vi. 26.) *Padova*, 1847

† Corso elementare di Fisica Sperimentale. 3 vols. (the last one entirely on Static Electricity.) 8vo. 235 and vii. pp. 1 plate. *Milano*, 1830-31-38

† Di una nuova maniera di Macchina elettrica immaginata dal sig. Dott. Giuseppe Belli. 4to. 18 pp. 1 plate. (*Ann. del Reg. Lomb.-Veneto*, i. 111.) *Padova*, 1831

On the Action between two equal square Plates placed perpendicularly to a right line joining their centres. . . . 4to. *Milano*, 1832

On Repulsion, or rarefied Air. 4to. (*Opuscoli Matematici e Fisici*, tom. i. 376.) *Milano*, 1832

† Riflessioni sulla Legge dell' attrazione molecolare. Memoria. 4to. 140 pp. 1 plate. (*Dei fascicoli*, 1, 2, 3, 4, *degli Opuscoli Matemat. e Fisici.*) *Milano*, 1833

† Sulla repulsione Elettrica nell' aria rarefatta. 4to. 2 pp. (*Fascicolo* 4° *degli Opuscoli Matematici e Fisici.*) *Milano*, 1833

† Sul dissiparsi, più facilmente . . . l'Elettricità negativa che non la positiva. Nota. 8vo. 5 pp. (*Bibliot. Ital.* lxxxi. 189.) *Milano*, 1836

† Sulla Elettricità negativa delle cascate. 8vo. 12 pp. 1 plate. (*Biblio. Ital.* lxxxiii. 32.) *Milano*, 1836

† Sulla dispersione delle due Elettricità. 2nd Mem. E sui residui delle scariche delle bocce di Leida. 8vo. 14 pp. (*Biblio. Ital.* lxxxv. 406-417.) *Milano*, 1837

† Sulla dispersione delle due Elettricità: sperienze. Continuazione (of 2nd Mem. called also 3rd Mem.) 8vo. 9 pp. 1 plate. (*Biblio. Ital.* lxxxvi. 276.) *Milano*, 1837

† Dichiarazione intorno ad alcuni punti della scienza dell' Elettricità. 8vo. 2 pp. (*Biblio. Ital.* xc. 370.) *Milano*, 1838

† Di un nuovo apparecchio per le sperienze sull' origine dell' Elettricità voltiana. 8vo. 20 pp. 1 plate. *Milano*, 1840

† Della distribuzione dell' Elettrico nei corpi conduttori. Recitata 28 Otto. 1839. 4to. 99 pp. 1 plate. (*Mem. Soc. Ital.* xxii. 111.) *Modena*, 1841

† Considerazioni sulle trombe di terra e di mare. 8vo. 7 pp. (*Gior. I. R. Inst. Lomb.* xv. 232.) *Milano*, 1846

† Altre considerazioni sulle trombe di terra e di mare. 8vo. 13 pp. (*Gior. I. R. Inst. Lomb.* xvi. 72.) *Milano*, 1847

† Di una sperienza per imitare artificialmente le Trombe o vortici atmosferici. Comunicata 4 Marzo, 1847. 8vo. 9 pp. (*Gior. I. R. Inst. Lomb.* xvi. 307.) *Milano*, 1847

Sulla possibilità di contrarie correnti Elettriche simultanee in uno stesso filo conduttore. 2nd Memoir. (From *Atti I. R. Inst. Lomb.* i. 76.) *Pisa*, 1857

† Sui mezzi di difendere i cronometri dal . . . Magnetismo terrestre. 4to. 2 pp. (*Atti dell' I. R. Inst. Lomb. Tornata* 4 *Giugno* 1857, vol. i. p. 9.) *Milano*, 1858

Belli, Giuseppe—*continued.*

† Cenni sul Professore Giuseppe Belli dell' Ingegnere D. G. Cantoni. Small 8vo. 16 pp. (*Estr. dalla Perseveranza, 19 Giugno,* 1860.) *Milano,* 1860

(*Vide* also Kramer and Belli.)

Bellin, Jacques Nicolas. *Born* 1703, *at Paris; died November* 21, 1772, *at Paris.*

Carte des variations de la boussole et des vents . . . dans les mers les plus fréquentées. (*Young,* p. 441.) *Paris,* 1765

Bellingeri, Carlo Francesco. *Died May* 15, 1848, *at Turin.*

† In Electricitatem salivæ, muci, et puris simplicis et contagiosi experimenta. 4to. 32 pp. Lecta Jan. 1828. (*Mem. della R. Accad. delle Scienze di Torino.*) *Torino,* 1828

Sperienze ed Osservazioni sul Galvanismo. 4to. (*Mem. de Turin,* xxiii. 143.) *Torino,* 1818

† Sulla Elettricità del Sangue nelle Malattie. Saggio di esperimenti. 4to. 83 pp. Presentato 30 Marzo, 1816 (*Mem. di Torino,* xxiv. 107.) *Torino,* 1820

† Sulla Elettricità dei Liquidi Minerali. Memoria presentata 23 Giugno, 1816. 4to. 19 pp. (*Mem. di Torino,* xxiv. 141.) *Torino,* 1820

† Memoria sull' Elettricità dell' Orina. 4to. 20 pp. Rimessa 24 Genn. 1819. (*Mem. di Torino,* xxiv. 459.) *Torino,* 1820

† Sulla proprietà Elettrica dei solidi animali. Memoria letta 12 Dec. 1819. 4to. 12 pp. (*Mem. di Torino,* xxv. 1.) *Torino,* 1820

† In electricitatem sanguinis, urinæ et bilis animalium experimenta habita. 4to. 24 pp. 1 plate. (*Mem. di Torino,* xxxi. 295.) *Torino,* 1827

† **Bellotti,** A. Dell' origine e del progresso dell' Arte Telegrafica. 8vo. 40 pp. 2 plates. *Milano,* 1844

Beltrami, P. Nuova scoperta . . . per preservare le Campagne dalla Grandine. . . 8vo. 27 pp. *Milano,* 1823

† Risposta . . . alle critiche Osservazioni del . . . Majocchi sui Paragrandini e Parafulmini, con Appendice di altra nuova probabile scoperta. . . . 8vo. 26 pp. *Milano,* 1823

† Difesa dei Paragrandini. . . . 8vo. 176 pp. *Milano,* 1824

Paralogismi di . . . contro la difesa de' Paragrandini . . . e Manuale pratico teorico. . . . 8vo. 171 pp. *Treviglio,* 1825

Li buoni effetti dei Paragrandini nell' An. 1825. 8vo. *Milano,* 1826

† Vendicazione dei Paragrandini. 12mo. 43 pp. *Lodi,* 1836

Bénard, M. Observations Ozonomètriques. 8vo. 19 pp. (From *Zuchold's Cat.* 1862, p. 133.) *Le Havre,* 1862

† **Benedict,** M. Elektrotherapie. 8vo. 485 pp. *Wien,* 1868

Beneni, S. De Igne, Luce, et Fluido Electrico propositiones physicæ. *Florentiæ,* 1790

† **Benet,** S. V. Colonel. Electro-Ballistic Machines and the Schultz Chronoscope. 4to. 47 pp. *New York,* 1866

Bennet, Abraham. *Born* 1750; *died May,* 1799.

Description of a new Electrometer. 4to. (*Phil Trans.* 1787, pp. 26-32.) *London,* 1787

An Account of a Doubler of Electricity, or a Machine by which the least conceivable quantity of positive or negative electricity may be continually doubled, till it becomes perceptible by common Electrometers or visible in sparks. 4to. (*Phil. Trans.* 1787, p. 288.) *London,* 1787

† New Experiments on Electricity, wherein the causes of thunder and lightning, as well as the constant state of positive or negative electricity in the air or clouds, are explained; with Experiments on Clouds of Powders and Vapours artificially diffused in the air. Also a Description of a Doubler of Electricity, and of the most sensible Electrometer yet constructed, with other new Experiments and Discoveries in the Science, illustrated by explanatory plates. 8vo. 141 pp. *Derby,* 1789

Bennet, Abraham—*continued.*

† A new Suspension of the Magnetic Needle, intended for the discovery of minute quantities of magnetic attraction; also an Air-vane of great sensibility; with new Experiments on the Magnetism of Iron-filings and Brass. 4to. 18 pp. (*Phil. Trans.* 1792, p. 81.) *London*, 1792

† **Bennet,** N. Account of a Waterspout in Watuppa Pond, at Freetown, in a Letter to Jno. Davis (dated October 5, 1793.) 4to. (*Mem. Amer. Acad.* old series, ii. part ii. p. 70.) *Charlestown*

Benoit. (*Vide* Fournet and Benoit.)

Benzenberg, Johann Friedrich. *Born May 5, 1777, at Schöller, between Elberfeld and Düsseldorf; died June 8, 1846, at Bilk.*

† Ueber Bestimmung der geographischen Lage durch Sternschnuppen. 8vo. *Hamburg*, 1802

† Die Sternschnuppen sind Steine aus den Mondvulkanen, die ein Durchmesser von 1, bis 5 Fuss haben, und welche bei 8,000 Fuss Geschwindigkeit in 1 Secunde nicht wieder auf den Mond zurückkommen und die dann mit Millionen um die Erde herumlaufen. 8vo. 80 pp. *Bonn*, 1834

† Die Sternschnuppen. 8vo. 375 pp. *Hamburg*, 1839

† **Benzenberg** and **Brandes.** Versuche die Entfernung, Geschwindekeit der Bahnen der Sternschuppen zu bestimmen. 8vo. 88 pp. *Hamburg*, 1800

Béraud, Laurent. *Born March 5, 1702, at Lyon; died January 26, 1777, at Lyon.*

† Dissertation sur le rapport qui se trouve entre la cause des effets de l'Aimant et celle des Phénomènes de l'Electricité, qui a remporté le Prix de l'Académie (*Rare. Neither Æpinus nor Van Swinden could find a copy.*) 4to. 38 pp. *Bordeaux*, 1748

Mémoire sur cette question, Pourquoi les Corps Electriques par eux mêmes ne reçoivent ils pas l'Electricité par communication. 1749

Mémoire sur l'Electricité fulminante. (Bursting explosivity of Electrical Machine.) Lu 1750 (15 Avril), dans une Séance de la Soc. Royale de Lyon. *Lyon*, 1750

† Theoria Electricitatis. 4to. 48 pp. *Petersbourg*, 1755

La Physique des Corps Animés, 12mo. *Paris*, 1755

Eloge de Béraud, par Lefebvre. 12mo. *Lyon*, 1780

Béraud. (*Vide* Euler, Frisi, and Béraud.)

† **Berdoe,** Marmaduke. An Enquiry into the influence of Electric Fluid in the structure and formation of animated beings. 8vo. 183 pp. 4 plates. *Bath*, 1771

On the Electric Fluid. 8vo. 1773

† **Beretta,** G. Lettera all' Amorelli sul Tormalino del Monte di San Gottardo. 4to. 3 pp. (*Opuscoli Scelti*, viii. 404.) *Milano*, 1785

Bergen, Carl August von. *Born August 11, 1704, at Frankfurt on the Oder; died October 7, 1759, at Frankfurt on the Oder.*

De Perseverantia virtutis Electricæ in Corpore electricitatis derivativæ. 4to. (*Nova Acta Acad. Nat. Curios.* ii. 158.) *Norimbergæ*

Observationes Meteorologicæ et Epidemicæ nec non electricæ. 1745

† **Berghaus,** R. Allgemeiner Erdmagnetischer Atlas. Consisting of 5 maps. Fol. *Gotha*, 1851

Bergman (or Bergmann), Torbern Olof. *Born March 9, 1735, at Katherinberg, West Gothland; died July 8, at Bad Medevi.*

† Anmerkungen vom stillen Wetterleuchten. 8vo. *Stockholm*, 1760

† A Letter concerning Electricity. 4to. (*Phil. Trans.* 1760, p. 907.) *London*, 1760

† Bemerkung von der Elektricität des Isländischen Krystales. 8vo. *Stockholm*, 1762

Bergman, Torbern Oloff—*continued.*

Observations on Auroræ Boreales in Sweden (1759). 4to. (*Phil. Trans.* 1762, p. 479.) *London*, 1762

Auroræ Boreales Annis 1759, 1760, 1761, et 1762, observatæ. 4to. (*Nova Acta Soc. Upsaliensis*, tom. i. p. 118.) *Upsala*

Observations in Electricity; and on a Thunderstorm. 4to. (*Phil. Trans.* 1763, p. 97.) *London*, 1763

† Elektrische Versuche mit Seiden Bande von unterschiedlicher Farbe. 8vo. *Stockholm*, 1763

† Some Experiments in Electricity. 4to. (*Phil. Trans.* 1764, p. 84.) *London*, 1764

Von der Höhe des Nordscheins. 8vo. *Leipsic*, 1764

Rede von der Möglichkeit des Donners schädlichen Wirkungen vorzukommen. 4to. *Stockholm*, 1764

† Elektrische Versuche, mit an einander geriebenenen Glas-Scheiben. 8vo. *Stockholm*, 1765

† Commentarius de indole Electrica Turmalini. 4to. *London*, 1766

† Zusatz zu der Abhandlung von der Höhe des Nordscheins. 8vo. 3 pp. (*K. Schwed. Akad.* xxviii. 230.) *Leipzig*, 1766

Experimenta Electrica, transitum commotionis per aquam illustrantia. 4to. (*Nova Acta Soc. Upsaliensis*, vol. i. p. 111.) *Upsala*, 1767

Von der Möglichkeit den schädlichen Wirkungen der Gewitter vorzubeugen. (*Aus dem Schwedische Magazine*, i. 39.) *Copenhagen*, 1768

† Zusatz zu Vorhergehenden, *i. e.* Wilcke, Bemerkungen bei einem den 30 May, 1769. . . . Donnerschlage. 8vo. 5 pp. (*K. Akad. Schwed. Abh.* xxxii. 128.) *Leipzig*, 1770

† Braune Turmalinen nach ihrem Grundstoffe untersucht von I. R. 8vo. 14 pp. (*Schwed. Akad.* xli. 199.) *Leipzig*, 1779

† Precipitations Versuche mit Platina, Nickel, Kobalt, und Magnesium. 8vo. 12 pp. (*K. Schwed. Akad. Neue Abhand.* i. 269.) *Leipzig*, 1780

† **Bergmann,** L. Die Telegraphie. 8vo. 80 pp. *Leipzig*, 1853

Bergsma, P. A. Dissertatio Historico-physica de phosphorescentia per irradiationem. 8vo. *Ultrajecti ad Rhenum*, 1854

Bergstrasser, J. A. B. 5 Sendungen über sein Problem. 8vo. *Braunschweig*, 1785-88

Erweiterung der Signal, &c. Schreiberei. (Not electrical.) *Leipzig*, 1795

Ueber Signal-Ordre und Zeitschreiberei in die Ferne oder über Synthematographie und Telegraphie. 8vo. (Not electrical.) *Frankfort*, 1795

Bérigny, Ad. Rapport sur les Observations Ozonomètriques faites avec le papier Schönbein, autour de la caserne de Saint Cloud (Seine et Oise), et au milieu de la cour à deux altitudes différentes, à sept heures et demie du soir pendant trente et un jours, (du 6 Octobre au 5 Novembre, 1855 (inclusivement). 2 Mémoire. 8vo. 24 pp. (*Extrait des Mémoires de Médecine, de Chirurgie, et de Pharmacie Militaires.*) *Paris*, 1856

Recherches et Observations pratiques sur le Papier Ozonométrique. 8vo. 15 pp. *Paris*, 1857

Vide also Deux-Ponts-Bérigny, E.A.

Berkel, A. Van. Reise nach Rio de Berbice (in der Sammlung, &c. aus dem Holland.) 8vo. (*Gymnotus, Observations in* 1680 to 1689.) *Memming*, 1789

† **Berkhout,** J. Dissertatio Physica Inauguralis, de fluxibus Thermo-electricis Acus magneticæ ope, observatis. 8vo. 71 pp. *Amstelodami*, 1843

Berlin. Gemeinnütz. Natur und Kunst Magazin. *Berlin*

Berlin Academy. Abhandlungen, physikalische, der Königlichen Akademie der Wissenschaften zu Berlin. 4to. *Berlin*

Berlinghieri, Vacca Leopold. *Born* 1732, *at Ponsacco, near Pisa; died October* 6, 1812, *at Montefoscoli.*

Elementi di Fisica del Corpo umano in stato di salute. 4to. (*Giornale di Med. Pratica di Brera*, ix. 171.) *Pisa*, 1783

† Method of communicating Magnetism to a Bar of Iron without a magnet. 8vo. 1 p. (*Phil. Mag.* xxxv. 157.) *London*, 1810

Elogio di . . Vacca Berlinghieri scritto dal Tantini. F. 8vo. (*Giornale di Med. Pratica di Brera*, ix. 171 *and* (*continuation*) 298.) *Padova*, 1816

Bern. Mittheilungen der Naturforschung Gesellschaft in Bern. *Bern*

Bernard, Claude. Sur l'influence du nerf grand sympathique sur la chaleur animale. 4to. (*Comptes Rendus*, 29 *Mai*, 1852.) *Paris*, 1852

† **Bernard,** C. A. Die Functionen des elektrischen Fluidums, vorzüglich in Hinsicht des menschlichen Körpers im gesunden und kranken Zustande. Inaugural Dissertation. 8vo. 70 pp. *Wien*, 1838

† **Bernardi,** A. Sulla declinazione dell' Ago. 8vo. 4 pp. (*Biblio. Ital.* lxiv. 255.) *Milano*, 1831

Bernouilli, Daniel. *Born January* 29, 1700, *at Gröningen; died March* 17, 1782, *at Basel.*

Mémoire sur la manière de construire les boussoles d'inclinaison pour faire, avec le plus de précision qu'il est possible, les observations d'inclinaison de l'aiguille aimantée, tant sur mer que sur terre, ce qui suppose des boussoles qui, étant mises dans un même lieu, donneront sensiblement la même inclinaison. 4to. (*Pièces de Prix de l'Académie de Paris*, v. *Mém.* 8.) *Paris*, 1743

Sur la cause physique de l'Aimant. 4to. (*Mém. de Paris*, 1746.) *Paris*, 1746

An Experiment on a Dog. (*Bonnefoy says, in Journal de Méd. Jan.* 1756, p. 56.) *Paris*, 1756

Le rapport de l'attraction de deux Aimants. (*Journal Helvétique, Nov.* 1758.) 1758

On the Magnets of Dietrich (civis Basilienai). Description of, &c. (*Nouvelle Bibliothèque Germanique*, tom. xvi. part i. p. 225.)

Bernouilli, Daniel et Jean. Nouveaux Principes de Méchanique et de Physique tendant à expliquer la nature et les propriétés de l'Aimant. 4to. (*Pièces de Prix de l'Académie de Paris*, v. *Mém.* 12, p. 115.) *Paris*, 1746

Bernouilli, J. *Vide* Euler, &c.

Bernouilli, Johan, I. Nouvelle manière de rendre les Baromètres lumineux. (*Mém. de Paris*, 1700.) 1700

Nouveau Phosphore. (*Mém. de Paris*, 1701.) 1701

Expériences sur la lumière que rendent les Corps frottés dans l'obscurité. 4to. (*Mém. de Paris*, 1707, *Hist.* p. 1.) *Paris*, 1707

Dissertatio de Mercurio lucente. *Bâle*, 1719

Bernouilli, Johan (3rd). *Born November* 4, 1744, *at Basle, Switzerland; died July* 13, 1807, *at Köpnick bei Berlin.*

Déclinaison de l'Aiguille aimantée observée à Berlin. 4to. (*Mém. de Berlin, An.* 1769, p. 490.) *Berlin*, 1769

Bernoulli, Cp. Ueber das Leuchten des Meers mit besonderer Hinsicht auf das Leuchten thierischer Körper. 8vo. *Göttingen*, 1803

† **Béron,** P. Atlas du Magnétisme Terrestre représentant l'aimantation de la terre par le soleil et l'aimantation du fer par la terre, avec un texte contenant l'explication de touts les faits magnétiques suivant les lois physiques. Appendice. Variations diurnes, annuelles, et séculaires des éléments magnétiques, &c. fol. 98 pp. 3 plates. *Paris*, 1860

Note.—The paging begins at p. 311. *The three very large folding plates are not sewed in the volume; they are numbered* 8, 9, *and* 10. *This is probably a part of his work, Grand Atlas Météorologique* (12 *plates*).

Réforme de la Physique par la découverte de la Stocchiométrie; des équivalents Electriques. Par Pierre Béron. 1er livraison. Janvier et Février, 1860. 8vo. 136 pp. (*Réforme fondamentale des Sciences.*) *Paris*, 1860

Béron—*continued.*

Electrostatique, contenant l'explication des faits Electriques et Electrochimiques de toutes les sciences, suivi d'un Appendice sur la cause physique des maladies, &c. *Paris*, 1861

† Météorologie simplifiée et Télégraphie sans fils et sans cables. 8vo. 944 pp. *Paris*, 1863

† **Bertelli,** Barnabita e **Palagi.** Sulla distribuzione delle correnti Elettriche nei conduttori. Esperienze. 8vo. 25 pp. 3 plates. *Bologna*, 1855

† Sopra Pietro Peregrino di Maricourt e la sua epistola de Magnete. Memoria prima. 4to. 32 pp. (*Estratto dal Bullettino di Bibliografia di Storia delle Scienze Matemat. e Fisiche*, tom. i. 1868.) *Roma*, 1868

† **Berthollet,** Claude Louis. *Born November* 9, 1748, *at Tullwire, Annecy, Savoy; died December* 6, 1822, *at Arcueil, Paris.*

Essai de Statique Chimique. *Paris*, 1803

† **Bertholon** de Saint Lazare. *Born* 1742, *at Lyon; died April* 21, 1800, *at Lyon.*

Rimedio per mal di denti. 12mo. 2 pp. (*Scelta d'Opuscoli*, xxl. 118.) *Milano*, 1776

Mémoire sur un nouveau moyen de se préserver contre la Foudre. 4to. *Montpellier*, 1777

Sur la cause Phosphorico-électrique des Aurores Boréales. 4to. (*Journal de Phys.* 1778.) *Paris*, 1778

Mémoire sur cette question: Quelles sont les Maladies qui procèdent de la plus ou moins grande quantité du Fluide Electrique? 8vo. *Lyon*, 1779

† De l'Electricité du corps humain dans l'état de santé et de maladie. Ouvrage couronné par l'Acad. de Lyon, dans lequel on traite de l'Electricité de l'Atmosphère, de son influence et de ses effets sur l'économie animale, &c. 8vo. 541 pp. *Paris*, 1780

Neue Elektrisirmaschine von Bertholon. (The Rubber in Motion.) 8vo, (*Lichtenbergs Mag.* i. 92.) *Gotha*, 1781

† Preisschrift über die Elektricität nach Medecinischen Gesichtspuncten betrachtet, nebst einem Anhange über die Gewitter und Gewitter Ableiter. 8vo. *Bern*, 1781

Sur l'Electricité, aérienne et artificielle. 4to. (*Journal de Phys.* 1782.) *Paris*, 1782

Lettre à M. de la Tourette, sur les Paratonnerres ascendants et descendants de la Ville de Lyon. (*Samml. zu Phys.* xix. *Mai* 1782, p. 382.) 1782

† De l'Electricité des Végétaux. Ouvrage dans lequel on traite de l'Electricité de l'Atmosphère sur les plantes, de ses effets sur l'économie des végétaux, de leurs vertus médico et nutrivo-électriques et principalement des moyens de pratique de l'appliquer utilement à l'agriculture, avec l'invention d'un électro-végétomètre. 8vo. 468 pp. *Lyon*, 1783

† Nouvelles Preuves de l'efficacité des Paratonnerres. 4to. 28 pp. 3 plates. *Montpellier*, 1783

† Estratto d'una Mem. sui Vegetabili che comunicano la scossa: e transunto d'una Mem. sulle Sabbie, &c., che trasmettono la scossa. 4to. (*Scelta d'Opuscoli, Nuova Ed.* iii. 80 and 389. *Originally printed in the* 12mo *edition in* 1777.) *Milano*, 1784

Ueber die Elektricität in Beziehung auf Pflanzen aus dem Französisch . . nebst Erfindung eines Elektrovegometers. 8vo. *Leipzig*, 1785

† De l'Electricité du Corps humain. Ouvrage couronné par l'Acad. de Lyon, dans lequel on traite de l'Electricité de l'Atmosphère, de son influence et de ses effets sur l'économie animale, des vertus médicales de l'Electricité, des découvertes modernes, et des différentes méthodes d'électrisation; avec un grand nombre de Figures en taille-douce. 2nd edition, 2 vols. 8vo. vol. i. 522 pp. vol. ii. 518 pp. 6 plates. *Paris*, 1786

† De l'Electricité des Météores. Ouvrage dans lequel on traite de l'Electricité naturelle en général et des Météores en particulier. 2 vols. 8vo. *Paris*, 1787

Bertholon de Saint Lazare—*continued.*

Anwendung und Wirksamkeit der Elektricität zur Erhaltung und Wiederherstellung der Gesundheit des menschlichen Körpers. 2 Theile. 8vo. *Leipzig*, 1788

Nouvelles expériences sur les effets de l'Electricité appliquée aux Végétaux. 4to. (*Journ. de Phys.* xxxv.) *Paris*, 1789

Die Elektricität der Lufterscheinungen. 2 vols. 8vo. *Leignitz*, 1792

* **Berthoud.** Eclaircissements sur l'invention, la théorie, la construction, etc. des machines pour la détermination des longitudes en mer. *Paris*, 1773

* Histoire de la mesure du temps par les horloges. *Paris*, 1802

Bertier (Berthier), J. E. Lettres sur l'Electricité. La physique des Comètes. *Paris*, 1760

† **Bertin**, P. A. *Born February* 13, 1818, *at Besançon, dep. Doubs.*

Thèses . . . sur les propriétés rotatives que prennent les corps transparents sous l'influence du Magnétisme, et Thèse . . . sur les phénomènes chimiques qui accompagnent le passage de l'Electricité à travers les corps . . . ou étincelles . . . ou courants. Presentées à la Faculté des Sciences de Paris. 4to. 38 pp. *Paris*, 1847

† Mémoire sur la rotation Electromagnetique des Liquides. 8vo. 26 pp. (*Extr. des Ann. de Chim.*, 3rd serie, vol. lv.) *Paris*

† Sur la Polarisation circulaire magnétique. 8vo. (*Extr. des Ann. de Chim.* 3rd series, vol. xxiii.) *Paris*, 1848

Discours sur les théories physiques en général et sur celles de l'Electricité en particulier. 8vo. *Strasbourg*, 1859

Sur les phénomènes de Polarisation magnétique dans les verres trempés et dans les parallélépipèdes de Fresnel. 4to. (*Compt. Rendus*, 1849, xxviii.) *Paris*, 1849

Bertin, E. Quelques réflexions sur les poussières atmosphériques, à propos d'un travail du Dr. de Vivenot sur un obscurcissement particulier du ciel en Sicile. 8vo. 20 pp. *Montpellier*, 1867

Bertoncelli, B. Di un nuovo Barometro e di un nuovo Barometrografo. Memoria . . . letta 23 Feb. 1854, all' Accademia. 8vo. (*Verona Accad. d'Agricul.* vol. xxx. p. 41, *on Hydrometrical Principles.*) *Verona*, 1854

Bertrand, Joseph L. François. *Born March* 11, 1822, *at Paris.*

Sur quelques points de la théorie de l'Electricité. (*Liouville. Journ. de Mathém.* 1839, iv.) 1839

† Programme d'une Thèse sur la distribution de l'Electricité à la surface des corps. 4to. 7 pp. *Paris*, 1839

† **Berrutti**, S. Elogio del . . . Vassalli Eandi. 8vo. 1839

Esperienze sulla esistenza delle correnti Elettrico-fisiologiche negli animali a sangue caldo. Eseguite nel gabinetto di fisica della Reale Università dal Prof. S. Berrutti, in compagnia dei . . Botto, Girola, Bellingeri, Demarchi, e Malinverni. 8vo. 32 pp. (*Ital. Soc. Mem.* xxii. 30.) *Torino*, 1840

Berzelius, Jöns Jacob, Freiherr von. *Born August* 29, 1779, *at Vafversunda Sorgärd im Stifte Linkoping, am Fusse des Omberg, zwischen dem Vettern und Tukern See; died August* 7, 1848, *at Stockholm.*

(*Poggendorff says that most of his works in the Academy, the Afh. Fisik, &c. are translated in the Ann. Chim. Phys. in der Zeitschrift von Gehlen, Schweigger, Gilbert, and Poggendorff, in which are also various smaller original treatises of his. He published more than* 200 *treatises and smaller articles.*)

† Afhandling om Galvanismen. sm. 8vo. 145 pp. (*Rare.*) *Stockholm*, 1802

De Electricitatis Galvanicæ Apparatu Col. Volta excitatæ in corpora organica. effectu. *Upsala*, 1802

Berzelius—*continued.*

Försök med elektrisa Stapelns verkan på Salter och på några af deras baser (mit Hisinger). (*Afh. i Fisik, &c.* tom. i.) 1806

Elektroskopica försök med. fargade paper. (*Afh. i Fisik*, tom. i.) 1806

Elektriska Stapelns Theori. *Afh. i Fisik*, tom. ii.) 1807

Om Magnetnälens afvikelser. (*Afh. i Fisik*, tom. ii.) 1807

† * Proposed Improvement of the Hygrometer. Translated from Berzelius's *Phil. Journal*, 1808. 8vo. 4 pp. (*Phil. Mag.* xxxiii. 39.) *London*, 1809

Försök att. genom användandet af den Elektro-kemiska propotionerna, grundlaga ett. rent vetenskapligt Systems för Mineralogien. *Stockholm*, 1814

† An attempt to establish a pure Scientific System of Mineralogy by the application of the Electro-chemical theory and the chemical proportions. Translated from the Swedish original by John Black. 8vo. 144 pp. (*Brugnatelli's copy.*) *London*, 1814

Versuch durch Anwendung der elektrisch-chemischen Theorie, &c. ein System der Mineralogie zu begrunden. Aus dem Schwedischen von Gahlen. 8vo. *Nurnberg*, 1815

† Essai sur la Théorie des proportions chimiques et sur l'influence chimique de l'électricité. Traduit du Suédois. 8vo. 190 pp. *Paris*, 1819

Versuch über die Theorie der chemischen Proportionen und über die chemischen Wirkungen der Elektricität; nebst Tabellen. Nach dem schwedischen und franz. Original ausgearbeitet von R. A. Blode. 8vo. *Dresden*, 1820

Om det Magnetiska tillstandet hos de kroppar, som urladda elektriska stapeln. 8vo. (*Vetensk. Acad. Handl.* 1820.) *Stockholm*, 1820

† Jahrsbericht über die Fortschritte der physichen Wissenschaften. Aus dem Schwedischen von F. Whöler. 8vo. 1822 to 1851

Untersokn af. en Meteorsten. 8vo. (*Vetensk Acad. Handl.* 1828.) *Stockholm*, 1828

† Power of Metallic Rods or Wires to decompose water after their connection with the Galvanic pile is broken. 8vo. 2 pp. (*Phil. Mag.* viii. 229.) *London*, 1830

Om Meteorstenar. 8vo. (*Vetensk Acad. Handl.* 1834.) *Stockholm*, 1834

† Théorie des proportions chimiques et Table synoptique des poids atomiques des corps simples, &c. Revue, corrigée, et augmentée. 2d edition. 8vo. 476 pp. *Paris*, 1835

Rapport annuel sur le progrès de la Chimie. Traduit par Plantamour. 8 vols. 8vo. *Paris*, 1841-8

† Vollständiges Sach-und Namen-Register zum Jahr's-Bericht über die Fortschritte der physischen Wissenschaften, der Chemie und Mineralogie. 1-25 Jahrg. 8vo. 180 pp. *Tubingen*, 1847

Neues chemisches Mineralsystem nebst einer Zusammenstellung seiner älteren hierauf bezüglichen Arbeiten. 8vo. *Nurnberg*, 1847

Lehrbuch der Chemie. 5 vols. royal 8vo. *Leipzig*, 1848

† Gedächtnissrede auf Berzelius; auswärtiges Mitglied der Academie, von Herr Heinr. Rose, gehalten . . . Akad. der Wissenschaften am 3 Juli, 1851. 4to. (*Abhandlung der Berlin Akad.* 1851.) *Berlin*, 1851

Berzelius und Hissinger. Afhandlingar i Fisik, Kemi och Mineralogie utgifne af W. Hissinger och J. Berzelius. 6 vols. *Stockholm*, 1806-1818

Vide also Hissinger and Berzelius.

† **Beseke,** Johann Melchior Gottlieb. *Born September* 26, 1746, *at Burg bei Magdeburg; died October* 19, 1802, *at Mitau.*

Ueber Elementärfeuer und Pflogiston als Uranfänge der Körperwelt, insbesondere über elektrische Materie. In einem Schreiben an Herr Achard. 8vo. 52 pp. *Leipzig*, 1786

† **Besio.** G. Nuova modificazione alla pila di Volta. Memoria. 8vo. 19 pp. 1 plate. *Lugano*, 1839

† **Bétancourt,** A. de. Nouvelle Télégraphie présentée par MM. Breguet et Bétancourt. (*Mém. de l'Institit.* tom. iii. *Bull. Soc. Philomath. A.* vi.)

In Gauss and Weber's Resultate, &c. for 1837, p. 14, is a footnote concerning a Notice communicated to Gauss by Humboldt, relative to a Wire (Drahtkelle) extended from Aranjuez to Madrid for telegraphic purposes, by Betancourt. Date, apud Moigno, p. 62, was 1787. 1787

Vide also Breguet and Bétancourt.

Beuchot. Bibliographie de la France. 8vo.

* † **Bevan,** B. On register Rain Gauges. (*Phil. Mag. or Annals*, ii. 74.) *London*, 1827

* † Remarks on Mr. J. Taylor's Rain Gauge. (*Phil. Mag. or Annals*, iii. 29.) *London*, 1828

† **Bevis,** John. *Born October* 31, 1695, *at Old Sarum, Wilts; died November* 6, 1771, *in London.*

An Account of a Luminous Appearance in the sky, seen in London on March 13, 1734-5. (*Phil. Trans.* xli. 347, printed 1744.) *London*, 1739-40-41

On Coating Glass Plates with Tinfoil, &c. (Inventor of.) (*Vide* Watson, *Phil. Trans.* 1747.) 1747

On Earthquakes. 8vo. 1769

† **Bew,** Charles. Electrical Cure; or, Opinions on the Causes and Effects of Tic-douloureux. 8vo. 94 pp. *London*, 1824

† **Beyer.** On Lightning-conductors, &c. 8vo. 2 editions. *Paris*, 1806-9

Bezaud (Bezault), L. Les Animaux et les Métaux deviennent-ils électriques par communication? (From *Poggendorff*, i. 146.) *Bordeaux*, 1749

† **Bezold,** W. von. Zur Theorie des Condensators. Inaugural Dissertation. 8vo. 60 pp. *Göttingen*, 1860

† Untersuchung über die elektrische Erregung der Nerven und Muskeln. 8vo. 330 pp. 2 plates. *Leipzig*, 1861

Ueber die physikale Bedeutung der Potential-Function in der Elektricitätslehre. 8vo. *München*, 1861

† **Bianchi,** G. Lettere . . . intorno l'Aurora Boreale veduta in Rimini addì 16 Dec. 1737. 12mo. 7 pp. (*Callogera, Raccolta*, xvii. 99.) *Venezia*, 1738

† Alcune Spiegazioni dell' Aurora o lume boreale. 12mo. 9 pp. (*Callogera, Raccolta*, xvii. 109.) *Venezia*, 1738

† Osservazioni intorno le Aurore Boreali vedutesi le sere de' 10 e 29 Mar. 1739. 12mo. 17 pp. 1 plate. (*Callogera, Raccolta*, xxi. 187.) *Venezia*, 1740

Sopra i piccoli moti apparenti osservati nei muri e nelle macchine della Reale Specola di Modena. Ricevuta 14 Dec. 1836. 4to. 55 pp. (*Ital. Soc. Mem.* xxi. 246.) *Modena*, 1837

Bianchi, Giovanni Batista. Lettre à Pivati. 4to. *Torino*, 1748

Bianchi, Iso. Elogio storico del Fromond. 4to. 64 pp. *Cremona*, 1781

† (*Note.—At p.* 42 *is Beccaria's letter to Fromond, dated Torino,* 27 *Gennajo,* 1754, *describing his experiment intended to prove that electric motions do not occur* in vacuo.)

† **Bianchini,** Dominicus. De Igne Electrico in naturam agente. 8vo. 15 pp. *Verona*, 1787

† **Bianchini,** Giovanni Fortunato. *Born Dec.* 27, 1719, *at Chieti, Neapel; died Sept.* 2, 1779, *at Padua.*

Saggio di esperienze intorno la Medicina Elettrica atte in Venezia da alcuni amatori di Fisica. Al Sig. Ab. Nollet. 4to. 116 pp. (*Vide Anonym. Recueil* xx. *for French translation. An address by the "Amatori" to Nollet is signed by the initials N.N.N.N.*) *Venezia*, 1749

† Osservazioni intorno all' uso dell Elettricitá celeste, e sopra l'origine del Fiume Timavo. Riportate in due Lettere. 4to. 92 pp. 1 plate. *Venezia*, 1754

Bianchini—*continued.*

1. Lettera intorno un nuovo Fenomeno Elettrico (1753), all' Accad. Reale di Parigi, 39 pp. 1 plate.
2. Osservazioni intorno al Fiume Timavo scritte in una lettera al . . Guido Conte Cobenzi (1754), 41 pp.

† 3. Another letter follows, entitled "Epistola Reverendi Patris Petri Imperati Bononiam missa (preceded by two pages by Bianchini, and dated Castello Pucino, Sept. 1752.

(*The first letter is dated Udine*, 1753. *Vassalli, p.* 10, *says*, "*printed in Mem. dell' Accad.* 1764," *and* "*La Lettera del Dottore sudetto fu scritta nel* 1753," *and contains Bianchini's account of the state of the conductors, &c., at the Castello Pucino in* 1752. *The third letter of* 1602 *contains an account* (*Latin*) *of the Ignis Fatuus called St. Helen's fire.*)

Lettera intorno un nuovo Fenomeno Elettrico. 4to. (*Mem. Paris*, 1764.) *Paris*, **1764**

On the Vertical Rod on the Chateau di Duino in the Friuli. 4to. (*Mémoires de l'Acad. pour* 1764, edit. orig. p. 44.) *Paris*, **1764**

† **Bianchini**, Giuseppe. Parere sopra la cagione della morte della Signora Contessa Cornelia Zangari ne' Bandi Cesenate, esposto in una lettera al Sig. Co. Ottolino Ottolini. 8vo. 70 pp. Two editions. *Verona*, **1731-33**

† An Extract by Rolli, P., of an Italian Treatise, written by Bianchini, J., upon the Death of the Countess Cornelia Zangari ne' Bandi, of Cesena. To which are subjoined Accounts of the Death of Hitchell, J., who was burned to death by Lightning, and of Grace Pitt at Ipswich, whose body was consumed to a coal. 4to. 19 pp. (*Phil. Trans.* xliii. 447.) *London*, **1744-45**

† Parere sopra la cagione della Morte della Contessa Cornelia Zangari ne' Bandi Cesenate . . . esposto in una lettera al Conte Ottolino Ottolini. 8vo. 147 pp. 4th edition. *Roma*, **1758**

(*This edition contains Cromwell Mortimer's Dissertation on Animal Heat* (*in French and Italian*) *from the Phil. Trans. Read 4th July*, 1745.)

Bianconi, Giovanni Lodovico. *Born Sept.* 30, 1717, *at Bologna; died Jan.* 1. 1781, *at Perugia.*

† Due Lettere di Fisica al Maffei. 4to. 72 pp. 1 plate, and 110 pp.

1. Delle caraffe di vetro che scoppiano al cadervi dentro di alcune picciole materie e di altri vetri curiosi. Lettera prima.
2. Della Velocità del Suono. Altra lettera. *Venezia*, **1746**

† Lettre sur l'Electricité, écrite par M. Bianconi à M. le Comte Algarotti. Dated Augsbourg, 3 Nov. 1747. 8vo. 40 pp. *Amsterdam*, **1748**

(*The printer or editor says that this forms a part of the 2nd vol. of the Journal des Savans d'Italie, and that the remarks are by the Journalists.*)

† Sendschreiben über die Electricität an Hn. Grafen Algarotti. Aus dem Französichen übersetzt. 8vo. 44 pp. *Basle*, **1750**

† Portrait of. C. Bianconi, del.; Benaglia, sculp.

Bianconi, G. Cenni intorno all' origine ed ai progressi dell' arte Galvanoplastica. 8vo. *Bologna*, **1841**

(*Nuovi Annali delle Scienze Naturali, Luglio, Bologna*, 1841, *mentions the goldsmith of Pavia, who knew the process of gilding very easily and cheaply by means of the pile in* 1818.)

Bianconi, G. B. Intorno all' origine ed ai progressi dell' arte Galvanoplastica. (*Nuovi Annali delle Scienze Naturali*, tom. viii. p. 72.)

Bibliografia Italiana. (From *Athenæum*, July 15, 1871, p. 82.)

Bibliographie de la France, ou Journal Général de l'Imprimerie. Première Année, Nov. 1811, à Dec. 1812. A volume every year since. Pillet, Rue des Grands Augustins, No. 5, Editor.

Bibliotheca Americana. (*Eng. Cat.* 1864. p. 65.) *New York*, **1850-61**

Bibliothèque Médicale, par une Société de Médecins.

(*Sue. Hist.* iv. 206, *says that the authors "ont, à commencer au No. X., p. 94, et suiv. produit une exposition abrégée des connaissances acquises jusqu'à ce jour sur le galvanisme, extraits des principaux ouvrages qui ont paru sur cette matière.*")

Bibliothèque, &c. (de Genève), consists of the following titles :

1.	Bibliothèque Britannique	. . . . .	1796	à	1815
2.	„ Universelle	. . . . .	1816	„	1835
3.	„ „	Nouvelle série . 1836-38	1836	„	1845
		3e série . . 1839-45			
4.	„ „	4e série	1846	„	1856 et seq.
5.	Archives de l'Electricité (Supplément)	. . .	1841	„	1845
6.	Archives des Sciences Physiques	. . . .	1846	„	1857 et seq.

† **Bibliothèque Italienne.** Ou Tableau des Progrès des Sciences et des Arts en Italie, par Giulio Gioberti, Vassalli Eandi, et Rossi. 5 vols. 8vo. (*Brugnatelli's copy.*) *Turin,* 1803-4

Bibliothèque Médico-Physique du Nord. Vicat, editor. 8vo. Divided into three independent parts. *Lausanne,* 1783

Biblioteca Germanica. Ridolfi, Bura, Santini, Configliachi, editori. 1822-23

Biblioteca Italiana, Ossia Giornale di Letteratura, Scienze, ed Arti, compilato da una Società di Letterati. 100 vols. 8vo. *Milano,* 1816-40

(*Note.—The compilers were Monti, Breislak, Giordani, Acerbi Direttore, Gironi, Carlini, Fumagalli, G. Brugnatelli, Configliachi, Ferrario, Cotena, and Fantonelli.*)

Notice of "Navigazione col mezzo del Galvanismo," taken from the *Glasgow Mechanics' Magazine,* No. 23, October. 8vo. (*Biblioteca Italiana,* xli. 447.) *Milano,* 1826

† Sul Monumento a Beccaria, &c. 8vo. 2 pp. (*Biblioteca Italiana* lxix. 397.) *Milano,* 1833

† Sull' Herschell ed altri. Stelle cadenti. 8vo. 4 pp. (*Bibl. Ital.* lxxxii. 323.) *Milano,* 1836

† Sul Dal Negro. 8vo. 2 pp. (*Bibl. Ital.* lxxxv. 121.) *Milano,* 1837

† Dei Metallici ricoprimenti. 8vo. 2 pp. (*Bibl. Ital.* lxxxix. 126.) *Milano,* 1838

† Reviews of Books and Papers relating to Electricity, &c.:
Shorter Notices of Writings. „
Extracts from and abridged Accounts of Books. „
Reprints of Articles in other Journals. „
Accounts of Experiments and Observations. „
Accounts of Electrical Atmospheric Phenomena, as Aurorse, &c.
Notices of various other matters referable to Electrical Science.
Reflections, Remarks, Notes, &c. „
Necrologies of Electricians.
8vo. 23 brochures. (*Bibl. Ital.* t. xxxiv. to xcix. inc.) *Milano,* 1824-40

† De' trasporti Metallici operati dall' Elettrico. 8vo. 3 pp. (*Bibl. Ital.* xcviii. 269.) *Milano,* 1840

Biblioteca Oltramontana, ad uso d'Italia ; colla Notizia dei Libri stampati in Piemonte. *Torino,* 1786 ?

Bichat, Xav. Physiologische Untersuchung über Leben und Tod. Im Auss. und mit Anmerkungen von Herold, aus dem Dänisch von Pfaff. 8vo. *Copenhagen,* 1802-3

† Recherches Physiologiques sur la Vie et la Mort. 3rd edit. 8vo. 347 pp. (*Guitard says* 1801, "*the 1st edition is* 1800." *Vide Cerise's 2nd edition of* 1856.) *Paris,* 1805

Anatomie générale appliquée à la Physiologie et à la Médecine. Nouvelle édition, précédée des Recherches Physiologiques sur la Vie et la Mort. 4 vols. 8vo. *Paris,* 1812 or 1818

Bichat—*continued.*

Anatomie générale, précédée des Recherches Physiologiques sur la Vie et la Mort, avec des Notes de Maingault. 2 vols. 8vo. Portrait. *Paris*, 1818

Anatomie générale. Nouvelle édition, avec des Additions par Béclard. 4 vols. 8vo. *Paris*, 1821

Recherches Physiologiques sur la Vie et la Mort. 4e édition, augmentée, par F. Magendie. 8vo. *Paris*, 1822

Recherches sur la Vie et la Mort, avec des Notes par Magendie. New edition. 8vo. *Paris*, 1822

† Recherches Physiologiques sur la Vie et la Mort. Nouvelle édition, précédée d'une Notice sur la Vie et les Travaux de Bichat, et suivie de Notes, par Cérise. 12mo. 382 pp. 1 vignette. *Paris*, 1856

† **Bidone**, Giorgio. *Born January* 19, 1781, *at Casal-Noceto, province Tortone, Piémont; died August* 25, 1839, *at Turin.* Description d'une nouvelle Boussole propre à observer les Mouvements de Rotation et de Translation de l'Aiguille aimantée, et Expériences . . . . Lecture le 28 Nov. 1807. 4to. 38 pp. 3 plates. (*Mém. de Turin*, 1809-10.) *Turino*, 1811

Bienvenu. On Mosaic Gold used in the Rubber of the Electric Machine about 1783 or 1784. 8vo. (*Lichtenberg's Mag.* ii. p. 211.) *Gotha*, 1783 or 1784

Biester, J. P. De acu Magnet. &c. 4to. (From *Friedlander's Cat.* No. 163, 1867, p. 6.) *London*, 1725

† **Bigot de Morogues**, Pierre Marie Sébastien Baron de. *Born April* 5, 1776, *at Orléans; died June* 15. 1840, *at Orléans.*

Anweisung zur Construction und Veranschlagung der Blitz-Ableiter . . nebst einem Nachtrage: über Taveniers Gewitters ableitende Säule . . 8vo. 102 pp. *Glogau*, 1834

† Mémoire Historique et Physique sur les Chutes des Pierres tombées sur la surface de la Terre à diverses époques. 8vo. 360 pp. *Orléans*, 1812

† Chronological Catalogue of Stones and other large Masses, which are presumed to have fallen on the Earth. 8vo. 4 pp. From the *Journal des Mines*, xxxi. 430. (*Phil. Mag.* xliii. 448.) *London*, 1814
(*This list begins in* 654 *before Christ, and ends in A.D.* 1812, *excepting one shower at Gideon in* 1451 *before Christ.*)

Bikker. Dissertatio de Natura Humana. (From *Van Troostwyk und Krayenhoff*, p. 162.) *Lugd. Bat.* 1757

Bilharz, Th. Das Electrische Organ des Zitterwelses, anatomisch beschrieben. Fol. *Leipzig*, 1857

Billaudel. Prem. Mém. on the Meteor of 17th February, 1823. (*Bordeaux Acad.*) 1823

Deux Mémoires sur la Météorologie and other matters. (*Bordeaux Acad.*)

On some Meteors observed at Bordeaux, and referred to Aurora. (*Bordeaux Acad.* Séance 1829, p. 43.) *Vide* also Lacour.

† **Billet**, J. Des Condensations Electriques; with Memoir on Light. 8vo. 7 pp. 1 plate. (*Ext. Acad. de Dijon.*) *Dijon*, 1851

De quelques Appareils pour l'Electricité dynamique. 8vo. *Paris*, 1854

Bina, Andrea. *Born Jan.* 1, 1724, *at Mailand.*

† Electricorum effectuum explicatio quam ex principiis Neutoniensis deduxit, novisque experimentis ornavit. 8vo. 157 pp. *Batavii*, 1751

Elektrische Versuche, Gewitter und Regen betreffend. Briefe an Kostner. 8vo. (*Hamburg Mag.* xii.) *Hamburg*, 1753

Lettera intorno all' Elettrizzazione dell' aria in occasione di tempo cattivo, &c. *Perugia*, 1753

Bina—*continued.*

† De Physicis experimentibus Chi. Wolfii, trans. 8vo. 2 vols. in 4 parts. 36 plates. *Venetiis*, 1753-56

(*The 2nd part of vol.* ii. (1756) *contains Bina*, "*De Electricis effectibus, &c., ab interprete addita*," 141 *pp.—viz., from p.* 215 *to* 356, 1 *plate. It is a 2nd edition of B.* 10, *but not so called in the title.*)

Vide also Wolf and Bina.

Bineteau, M. A. Note sur l'Ozone atmosphérique. 8vo. 8 pp. *Lyon*, 1855

† **Biot**, Jean Baptiste. *Born April* 21, 1774, *at Paris; died Sept.* 8, 1862.

Some Articles on Electricity in the Bulletin de la Société Philomathique. 1801 to 1816

Rapport sur les Expériences de Volta. 4to. (*Mém. de l'Inst.* vol. v. 1802.) *Paris*, 1802

(*The commission appointed in consequence of the First Consul's letter consisted of Laplace, Hallé, Coulomb, Haüy, and Biot. This commission was appointed on the . . .? The above report was made "le Messidor suivant,"* 30*th June. The medal given to Volta is dated* 11 *Frimaire, an X.* 2*nd December*, 1801.)

† Sur le Mouvement du Fluide galvanique. 4to. 11 pp. (*Soc. Philomath.* an 9, No. 54, p. 45, par extrait.) *Paris*, 1802

Observation sur les Pierres météoriques. 4to. (*Soc. Philomath.* an 11, p. 129.) *Paris*, 1803

Recherches sur cette question : Quelle est l'influence de l'oxidation sur les effets de la Colonne électrique de Volta. 4to. (*Soc. Philomath.* an 11, p. 120.) *Paris*, 1803

† Relation d'un Voyage fait dans le Département de l'Orne pour constater la vérité d'un Météore observé à l'Aigle le 26 Floreal, an 11. 4to. 47 pp. 1 plate (*i. e.*, carte des lieux.) (*Lu à l'Institut. le* 29 *Messidor, an* 11.) 1803

† Notice sur l'état actuel des Connaissances relatives au Galvanisme. 8vo. 3 pp. (*Lu à la Séance Publique de l'Instit. National le* 1 *Messidor, an* 11.) *Paris*, 1803

† Account of a Fire-ball which fell in the neighbourhood of Laigle : in a Letter to the French Minister of the Interior. By C. Biot, Member of the National Institute. Dated July 20, 1803. 8vo. 5 pp. (*Phil. Mag.* xvi. 224.) *London*, 1803

† On the Formation of Water by compression ; with Reflections on the Nature of the Electric Spark. Read before the National Institute. 8vo. 3 pp. (*Phil. Mag.* xxi. 362.) *London*, 1805

† Traité de Physique. 8vo. *Paris*, 1816

Terrestrial Magnetism, by T. S. Evans. 8vo. *London*, 1817

Précis élémentaire de Physique expérimentale. 2 vols. 2nd edition. German translation. *Vide* Fechner. *Paris*, 1818 and 1824

Translation of Fischer ; Physique mécanique, avec des Notes et un "Appendice sur les Anneaux colorés . . . le Magnétisme," &c. 8vo. *Paris*, 1830

Mémoire sur la vraie Constitution de l'Atmosphère terrestre, déduite de l'expérience, &c. 1841

† Mélanges scientifiques et littéraires. 3 vols. 8vo. *Paris*, 1858

Cenno Biografico dell' illustre G. B. Biot, redatto dal Professore P. Volpicelli, 4to. 4 pp. (*Atti dell' Acad. de' Nuovi Lincei Ann.* xv. Sess. iv. del 2 Marzo, 1862.) *Roma*, 1862

Vide also Gay-Lussac and Biot.

„ Humboldt and Biot, and Anon. Elect. 1821.

† **Biot and Becquerel.** Sur la Nature de la Radiation émanée de l'Etincelle électrique qui excite la phosphorescence à distance. 4to. 5 pp. (*Comptes Rendus*, 1839, 1 sem. viii. No. 7, p. 223.) *Paris*, 1839

Vide also Becquerel Biot, &c.

Biot et Cuvier.

Sur quelques Propriétés de l'Appareil galvanique. 4to. (*Soc. Philomath.* an 9. p. 40. *Sue, Hist.* ii. 161, says: "Voyez aussi les *Ann. de Chim.* xxxix. 247. Elles contiennent une édition tout à fait différente de cet article.") *Paris*, 1801

Biot, Edouard Constant. *Born July* 2, 1803, *at Paris; died March* 12, 1850, *at Paris.*

† Catalogue général des Etoiles filantes et des autres Météores observés en Chine pendant vingt-quatre siècles. Depuis le vii^e^ siècle avant J.C., jusqu'au milieu du xvii. de notre ère. Présenté à l'Acad. les 31 Mai et 26 Juillet, 1841. 4to. 224 pp. 1 plate (ou tableau circulaire.) (*Acad. des Sciences, Savants étrangers*, tom. x.) *Paris*, 1841 ?

† Note supplémentaire au Catalogue des Etoiles filantes et des autres Météores observés en Chine. 4to. 8 pp. *Paris*, 1848

Birch. Observations on Medical Electricity. 8vo. 2 editions. 1779-80

† Letter to Adams on Medical Electricity. 8vo. *Vide* also Adams. 1792

† **Birch,** J. Della Forza dell' Elettricità nella cura della soppressione . . . 4to. *Napoli*, 1778

(*Forms part of Vivenzio's translation of Cavallo, &c.*)

† Considerations on the efficacy of Electricity in removing Obstructions with ease. 8vo. 60 pp. (*Volta's copy.*) *London*, 1779

† Essay on the Medical Application of Electricity. 8vo. 57 pp. *London*, 1803 (*Formerly published in Adams's Electricity, now revised and reprinted by itself.*)

Birch, Thos. On the luminousness of Electricity. 4to. (*Phil. Trans.* 1754.) *London*, 1754

† **Bird,** G. (Captain). Fall of a Meteoric Stone, 18th February, 1815, near the village of Dooralla (in the territory belonging to the Pattialah Rajah,) India. 8vo. 2 pp. (*Phil. Mag.* lvi. 156.) *London*, 1820

Bird, Golding. *Born* 1815, *in Norfolk.*

† Lectures on Electricity and Galvanism, in their physiological and therapeutical relations, delivered at the Royal College of Physicians. Revised and extended. 12mo. 212 pp. Cuts. *London*, 1849

On Medical Electricity. (*Med. Gaz.*, June, 1847; and *Guy's Hospital Reports*, 1852, viii. pp. 139-46.)

† **Birt,** W. R. Report on the Discussion of the Electric Observations at Kew. 8vo. 87 pp. 6 plates. (*Report of the British Association for* 1849.) *London*, 1850

† **Birnbaum,** H. Das Reich der Wolken. *Leipzic*, 1859

Bischof. *Vide* Nöggerath and Bischof.

Bischoff. Das Volta-Elektrometer (of water, &c.) "als Maass für die Thätigkeit der Voltaischen Säule." (*Physikisches Wörterbuch*, 2 Abtheil. vol. iv. p. 885.)

Bischoff, C. H. Ern. Commentatio de usu Galvanismi in Arte Medica, speciatim in morbis Nervorum Paraliticis. 8vo. 2 plates. (From *Sue, Hist.* iii. 67.) *Jena*, 1801

Bischof, C. G. C. Ueber die Magnetische Eigenschaft. einiger Gebirgsarten des Fichtelgebirgs. 8vo. (*Schweigger's Journal*, xviii.) *Nürnberg*, 1816

Untersuch über die Elektrometrische und Chemische Wirkungen der Voltaischen Säule. 8vo. (*Kästner's Archives*, iv.) *Nürnberg*, 1825

Elektrometrische Wirkungen der Voltaische Säule und Leitungsfähigkeit des Glasses. 8vo. (*Schweigger's Journal*, xxxvi.) *Nürnberg*, 1822

Beitrage zum Elektro-magnetism. 8vo. (*Kästner's Archives*, i.) *Nürnberg*, 1824

Bischof—*continued.*

Ueber Volta's Fundamentalversuch. 8vo. (*Poggendorff's Annalen*, i.) *Leipzig*, 1824

Ueber die Bitburger Meteoreisen. 8vo. (*Poggendorff's Annalen*, ii.) *Leipzig*, 1824

Verfahren die Elektro-chemische Reihe der Metallen zu bestimmen. 8vo. (*Schweigger's Journal*, liii.) *Nürnberg*, 1827

† **Bismark,** Graf Von. Telegraphen-Ordnung für die Correspondenz im Deutsch-Oesterreichischen Telegraph-Verein, &c. Nebst den den innern Verkehr auf den Preussischen Linien betreffenden zusatzlichen Bestimmungen. Reglement für die Benutzung der Preussischen Eisenbahn-Telegraphen zur Beförderung solcher Depeschen, welche *nicht* den Eisenbahndienst betreffen. Nebst den übrigen Bestimmungen für den Expeditionsdienst im Telegraphischen Verkehr, so weit solcher durch Preussische Staats und Preussische Eisenbahn-Telegraphen vermittelt wird. 8vo. 30 pp. *Berlin*, 1866

† Reglement über die Benutzung der innerhalb des Nord-deutschen Telegraphen-Gebietes gelegenen Eisenbahn-Telegraphen zur Beförderung solcher Depeschen, welche nicht den Eisenbahn-dienst betreffen. 8vo. 15 pp. *Berlin*, 1868

† Telegraphen-Ordnung für die Correspondenz auf den Linien des Telegraphen-Vereins, &c. Nebst den den innern Verkehr auf den Linien des Nord-deutschen Telegraphen-Gebietes und der innerhalb desselben gelegenen Eisenbahnen betreffenden zusätzlichen Bestimmungen. Desember, 1868. 8vo. 19 pp. *Berlin*, 1868

Bizio, Bartolommeo. *Born at Costozza, near Venice; died September 27, 1862, at Venice.*

Opuscoli Chimico-fisici. 8vo. tom. i. *Venezia*, 1827

† Intorno alle Molecole dei Corpi ed alle loro affinità dipendenti dalla Forza repulsiva insita alle Medesime. 4to. 120 pp. (*Nel* i. *Mem. dell' Imp. Regio Istit. Veneto di Scienze, Lettere ed Arti.*) *Venezia*, 1843

† Osservazioni intorno ad una condizionata particolarità della Grandine. 4to. 6 pp. (*Mem. dell' I. R. Istit. Veneto*, vi. part ii. p. 341.) *Venezia*, 1856

† **Bjerkander,** Clas. Auszug aus den zwanzigjährigen Witterungsbeobachtungen zu Seara welche zeigen wie oft die Donnerwetter gewesen sind. 8vo. 3 pp. (*Schwed. Akad. Abh.* xxxvii. 184.) *Leipzig*, 1775

† Fernere Anmerkungen über Donnerwetter. 8vo. 3 pp. (*K. Schwed. Akad. Abh.* xli. 220.) *Leipzig*, 1779

Bjorn, Hans Outzen. *Born Dec. 14, 1777, at Astrup, Brönø Sogn, Torningelehn; died May 15, 1843, at Frydenlund.*

De indole et origine Aërolithorum. 8vo. 88 pp. (*Heinsius*, vi. 85.) *Altona*, 1816 (*Contains many citations of books on the subject.*)

† **Black,** Jn. An attempt to establish a pure System of Mineralogy by the application of the Electro-chemical Theory, by T. J. Berzelius. Translated from the Swedish original. 8vo. 138 pp. (*Brugnatelli's copy.*) (*Vide* Berzelius.) *London*, 1814

† **Blackwall,** J. On luminous Arches of the Aurora Borealis seen at Manchester on the 1st and 26th December, 1828; and on that of the 29th of September, as seen at Dublin. 8vo. 2 pp. (*Phil. Mag. or Annals*, v. 153.) *London*, 1829

† **Bladth,** P. J. Berattelse om tvänne aske-slag som traffat Svenska skeppet Stockholms-Slott, i Ost-Indien, an 1777. (*Vetensk Acad. Nya Handl.* 1780, p. 102.) 1780

Bericht von zwei Blitz-Schlägen, welche das Schwedische Schiff Stockholms-Schloss in Ost-Indien, 1777, getroffen haben. 8vo. 14 pp. (*Neue Schwedische Akademie Abhandlung*, i. 1780, p. 97.) Translation. *Leipzig*, 1780

Blainville. On Organs of the Torpedo. (From *Matteucci and Sari.*)

Blagden, Sir Ch. An Account of some Fiery Meteors. 4to. (*Phil. Trans.* lxxiv. part i. 1784.) *London*, 1784

(*Toaldo, in vol.* iv. *p.* 283, *of the* "*Completa Raccolta*," *refers to this volume as* "*containing six articles on* '*Fiamma Volante*,' *Nos.* 8, 9, 10, 11, *and* 12, *containing various descriptions, &c., from different places concerning the globe* (*fire-ball*) *of the* 18*th of August*, 1783." *The last description is by Blagden, who thought fire-balls were electrical bodies.*)

Blanc. *Vide* Le Blanc.

Blanford. *Vide* Gastrell and Blanford.

† **Blaserna,** Pietro. Ueber den inducirten Strom der Nebenbatterie. (Vorgelegt 22 Juli, 1858.) 8vo. 46 pp. (*Aus den Sitzungsberichten* 1858 *der Mathem. Naturwiss. Classe der Kais. Akad. der Wissenschaften*, xxxiii. No. 24.) *Wien*, 1858

Ueber den inducirten Strom der Nebenbatterie. 8vo. 10 pp. (*Aus den Sitzungsberichten* 1859 *der Mathem. Naturwiss. Classe der K. Akad. der Wissenschaften.*) *Wien*, 1859

† Sullo sviluppo e la durata delle correnti d'induzione, e delle estra-correnti. Prima Memoria. 4to. 135 pp. 5 plates. (*Estratto dal Giornale delle Scienze Naturali ed Economiche*, vi. 1870.) *Palermo*, 1870

† **Blaserna, Mach, und Peterin.** Ueber elektrische Entladung und Induction. (Vorgelegt 14 Juli, 1859.) 8vo. 50 pp. (*Aus den Sitzungsberichten* 1859, *der Kais. Akad. der Wissenschaften*, xxxvii. No. 20.) *Wien*, 1859

† **Blavier,** E. E. Cours théorique et pratique de Télégraphie Electrique, par E. E. Blavier, Inspecteur des Lignes Télégraphiques. 12mo. 467 pp. 6 plates. *Paris*, 1857

Propagation de l'Electricité. Note sur la Réponse de M. Guillemin aux Observations de M. Gounelle. 8vo. 45 pp. *Nancy*, 1865

† Nouveau Traité de Télégraphie Electrique. Cours théorique et pratique à l'usage des Fonctionnaires, des Ingénieurs, &c. Tom. i. 8vo. 476 pp. *Paris*, 1865

† Nouveau Traité de Télégraphie Electrique. Cours théorique et pratique à l'usage des Fonctionnaires, des Ingénieurs, &c. Tom. ii. 8vo. 479 pp. *Paris*, 1867

Blesson. John Ludwig Urban. *Died Jan.* 19-20, 1861, *at Berlin.*

Magnetismus und Polarität der Thon-Eisensteine und deren Lagerstätte in Oberschlesien und den baltischen Ländern. 8vo. *Berlin*, 1816

† Ueber eine Verbesserung an Blitz-ableitern. 4to. 4 pp. 1 plate. *Berlin*, 1831

Bloch. Naturgeschichte der ausländischen Fische. Th. ii. 4to. *Berlin*, 1786

† **Block,** F. T. Dissertatio Physica altera de Electricitate. Thesis read 3rd February, 1753. 4to. 32 pp. *Duisburgi ad Rhenum*, 1753 ?

Blois. Bibliothèque Publique. Catalogue. Fol. MS. *Blois, n.d.*

Blodget. *Vide* Whipple, Blodget, &c.

Blondeau. Mémoires sur les Variations de l'Intensité magnétique ; sur les Rapports du Magnétisme avec l'Electricité, avec les différents Etats de l'Atmosphère, &c. (*Mém. de l'Acad. de Brest*, i. 421.) *Brest*

Mémoire sur l'Effet de deux Aiguilles aimantées placées l'une sur l'autre, lorsque librement suspendues elles se trouvent dans leur sphère d'activité réciproque, à peu près dans le même plan horizontal. (*Mém. de Brest*, i. 401.) *Brest*

Blumenbach, Johann Friedrich. *Born May* 11, 1752, *at Gotha ; died Jan.* 22, 1840, *at Göttingen.*

Institutiones Physiologiæ. 8vo. Ed. nova. *Göttingen*, 1798

Nachricht über Meteorsteine. 8vo. (*Voight's Mag.* vii. und *Gilbert's Ann.* xviii.) *Jena*, 1804

† **Blundell,** W. Telegraphic Companies considered as Investments, with Remarks on the superior Advantages of Submarine Cables. 8vo. 22 pp. *London*, 1869

† The Manual of Submarine Telegraphic Companies. 8vo. 64 pp. *London*, 1871

† **Bobierre,** A. Thèse de Physique. Des Phénomènes Electro-chimiques qui caractèrisent l'Altération à la Mer, des Alliages employés pour doubler les Navires. 4to. 79 pp. 1 plate. *Nantes*, 1858

Boccone, P. Osservazioni Naturali. 12mo. (*Fosforo di Bologna*, and *Iron Magnetic Rings*, &c.) (*From Libri's Sale Cat.* 1861.) *Bologna*, 1684

Bock, F. S. Versuch einer kurzen Naturgeschichte des Preussischen Bernsteins, und einer neuen wahrscheinlichen Erklärung seines Ursprungs. *Königsberg*, 1767

Böck, J. G. Beitrage zur Anwendung der Elektricität auf den menschlichen Körper. 8vo. *Erlangen*, 1791

Boeckel, Th. De l'Ozone comme Elément Météorologique. 8vo. 20 pp. (*Ext. de la Gazette Médicale de Strasbourg.*) *Strasbourg*, 1865

Bockmann. Ueber Blitzableiter. Eine Abhandlung auf höchsten Befehl bearbeitet. Neue Auflage von Wucherer. *Karlsruhe*, 1830

Ueber Blitzableiter. 3 Auflage von G. F. Wucherer. 8vo. *Carlsruhe*, 1839

Boeckmann, Johann Lorenz. *Born May* 8, 1741, *at Lubeck; died Dec.* 15, 1802, *at Carlsruhe.*

Description de l'Aurore Boréale. Extrait du 28 Juillet, 1780. 4to. (*Mém. Berlin*, 1780.) *Berlin*, 1780

Abhandlung über eine ganz neue Erscheinung an den sogenannten Glas-Bomben, nebst einer Anwendung auf die Entstehung gefrorner Fenster-Scheiben und einem Anhang von electrischen Sternen. 4to. (*Neue Abhandl. der Bairischen Akad. Philos.* iii. p. 1.) *München*, 1783

Abhandlung über die Anwendung der Electricität, bei Krankheiten. 8vo. *Durlach*, 1786

Beschreibung des Apparats für Luft-elektricität. 8vo. (*Gren's Journal*, i. 1790.) *Leipzig*, 1790

Beschreibung einiger neuen Werkzeuge zum Bestimmen der kleinsten Grade der Elektricität. 8vo. (*Gren's Journal*, i. 1790.) *Leipzig*, 1790

† Ueber die Blitzableiter. Eine Abhand. auf höchsten Befehl des Fürsten. 8vo. 80 pp. *Carlsruhe*, 1791

Versuch über Telegraphie und Telegraphen. 8vo. *Carlsruhe*, 1794

Bodde, Johann Bernhard. *Born Nov.* 24, 1760, *at Lette Herrschaft, Rheda; died July* 24, 1833, *at Münster.*

† Grundzüge zur Theorie der Blitzableiter. 8vo. 84 pp. *Münster*, 1809

Boddington. An accurate Statement of Facts relative to a Stroke of Lightning which happened on the 13th April, 1832. 8vo. *London*, 1832

Bodleian Library. Catalogue. MSS. *Oxford*
(*Collated partially by Sir Francis Ronalds in* 1847.)

Catalogus Librorum impress. Bibliot. Bodleianæ. 3 vols. fol. *Oxford*, 1843

Catalogue of Books added to the Bodleian Library in each of the years 1826 to 1836. Fol. *Oxford*

Boehm, J. Untersuchungen über das atmosphärische Ozon. 8vo. 34 pp. 1 plate. (*Aus den Sitzungsberichten* 1858, *der Kais. Akad. der Wissenschaften.*) *Wien*, 1858

Boerhaave. Essay on the Virtue of Magnetical Cures. From the Latin. 8vo. *London*, 1743

† **Boggio,** Ig. Indoratura ed inargentatura Elettrico-chimica. 8vo. 59 pp, *Novara*, 1848

Bohadsch, Johann Baptist. *Born* 1724, *at Prag; died Oct.* 16, 1768, *at Prag.*

† Dissertatio de utilitate Electrisationis in Arte Medica. 4to. 24 pp. (*Volta's copy.*) *Pragæ*, 1751

Bohadtch. Treatise on Medical Electricity. 4to. (*Phil. Trans.* xlvii. p. 351.) *London*

Böhm, Joseph George. *Born March* 27, 1807, *at Rozdialowitz Böhmen, Kr. Bunzlau.*

Bohm and Kunes. Magnetische und Meteorologische Beobachtungen zu Prag. Auf öffentliche Kosten herausgegeben von Jos. G. Böhm und Adalbert Kunes. Jahrgänge vom 1 Jan. 1850, bis 31 Dec. 1852. 3 vols. 4to. *Prague*, 1853-55

Bohm. (*Vide* Kriel and others.)

Bohnenberger, Gottlieb Christian. *Born March* 4, 1732, *at Neuenberg, Wurtemberg; died May* 29, 1807, *at Altburg.*

† Beschreibung einer . . . Electrisir Maschine nebst einer neuen Erfindung, die Electrische Flaschen betreffen. 8vo. 76 pp. 6 plates. (*Volta's copy.*) *Stutgart*, 1784

† Fortgesetzte Beschreibung, einer Electrisir Maschine von ganz neuer Erfindung. 8vo. 110 pp. 6 plates. (*Volta's copy.*) *Stutgart*, 1786

† Beschreibung einer Elektrisir Maschine und einiger neuen Versuche. 8vo. 138 pp. 4 plates. Zweite Fortsetzung. (*Volta's copy.*) *Stutgart*, 1786

† Beschreibung einiger Elektrischer Maschinen und Elektrischer Versuche. 8vo. 224 pp. 5 plates. Dritte Fortsetzung. (*Volta's copy.*) *Stutgart*, 1788

† Beschreibung einiger Elektrischer Maschinen und Elektrischer Versuche. 8vo. 252 pp. 4 plates. Vierte Fortsetzung. *Stutgart*, 1789

† Beschreibung einiger Elektrisir Maschinen und Elektrischer Versuche. 8vo. 333 pp. 5 plates. Fünfte Fortsetzung. (*Volta's copy.*) *Stutgart*, 1790

Neue Gedanken über die Möglichkeit Elektrische Verstärkungs-flaschen weit stärker als bisher zu laden. 8vo. (*Gren's Journ.* ii. 1790.) 1790

† Beschreibung einiger Elektrischer Maschinen und Elektrischer Werkzeuge. 8vo. 352 pp. 4 plates. Sechste und lezte Fortsetzung. (*Volta's copy.*) *Stutgart*, 1791

† Beyträge zur theoretischen und praktischen Elektrizitätst-lehre. 8vo. 154 pp. Erste Stück. *Stutgart*, 1793

† Beyträge zur theoretischen und praktischen Elektricitäts-lehre. 8vo. 178 pp. 1 plate. Zweites Stück. *Stutgart*, 1793

† Beyträge zur theoretischen und praktischen Elektricitäts-lehre. 8vo. 166 pp. 2 plates. Drittes Stück. *Stutgart*, 1794

† Beyträge zur theoretischen und praktischen Elektricitäts-lehre. Viertes Stück. 8vo. 183 pp. 1 plate. *Stutgart*, 1795

Beyträge zur theoretischen und praktischen Elektricitäts-lehre. Fünfte Stück. 1795

† Beschreibung unterschiedlicher Elektrizitätsverdoppler von einer neuen Einrichtung nebst. . . . Versuchen. 8vo. 271 pp. 5 plates. *Stutgart*, 1798

Beschreibung und Gebrauch eines sehr empfindlichen Elektrometers, welches zugleich die Art der Elektricität anzeigt. 8vo. (*Gilb. Ann.* li.) 1815

Boily. Iconographie de l'Institut Royal de France. . . . Portraits des Membres depuis 1814 jusq'en 1825. Lithog. par Boily. 4to. 190 portraits. *Paris*

† **Bois,** Victor. La Télégraphie Electrique. 1st edition. 8vo. 114 pp. (*Forms part of the Bibliothèque des Chemins de Fer.*) *Paris*, 1853

† La Télégraphie Electrique. 2nd edition. 12mo. 128 pp. *Paris*, 1855 *or* 1856

Boismont. (*Vide* Brierre de Boismont.)

† **Boisbouvray,** Baron de. Un mot sur l'Electricité. 8vo. 71 pp. *Paris*, 1823

† **Boisgerard,** Jun. On the Action of the Voltaic Pile upon the Magnetic Needle. Read in the Academy 9th November, 1820. 8vo. 4 pp. (*Phil. Mag.* lvii. 203.) *London*, 1821

Bois Reymond. (*Vide* Du Bois-Reymond.)

Boissac. (*Vide* Marqfoy and Boissac.)

† **Boissier,** H. Mémoire sur la Décomposition de l'Eau par les Substances métalliques. 4to. 7 pp. *Paris*, 1801

Bollenatus Burgundo-gallus. Theses physicæ de Meteoris ignitis. 4to. 8 pp. 1607

Bolley, Pompejus. *Born May* 7, 1812, *at Zindelberg.*

† Was ist ein elektrischer Telegraph. 8vo. Cuts. (*Aus dem Schweizerischen Gewerbeblatt.*) *Aarau*, 1852

Bollinger, A. F. De effectu catalytico Rivi galvanici constantis. *Berol.* 1863

† **Bologna Academy.** Notizia del Nuovo Istituto dell' Accad. di Bologna, di Corazza. 8vo. 207 pp. *Bologna*, 1780

Memoria storica sopra l'Università e l'Istituto delle Scienze di Bologna; di Mazzetti. 8vo. *Bologna*, 1840

1. Acad. Bonon. et Instit. Commentarii. 7 vols. (in 10 parts). 4to. 1731 *ad* 1791
2. Mem. dell' Istit. Nazionale Ital. 3 vols. (in 6 parts). 4to. 1806 *ad* 1813
3. Comment. Novi Acad. Scient. Bonon. 10 vols. 4to. 1834 *ad* 1850
4. Mem. dell' Accad. dell' Istit. di Bologna. 4to. 1850

(*Part of these are in the Library.*)

Rendiconto delle Sessioni dell' Accad. . . . dell' Istituto di Bologna. 8vo. *Bologna*

† Programma del Premio Aldini. 8vo. 1 p. (*Giornale I. R. Ist. Lombardo*, viii. 281.) *Milano*, 1843

† Programma dell' Accad. dell' Istituto di Bologna. 8vo. (*Giornale I. R. Ist. Lombardo*, xiii. 408.) 1846

(*Not having conferred "il Premio Aldini sul Galvanismo" hitherto, the Academy re-proposes the subject in new terms.*)

Programma dell' Accad. dell' Istituto di Bologna. Concorso al Premio Aldini sul Galvanismo. 4to. (*Giornale I. R. Ist. Lombardo, nuova serie*, viii. 352.) 1856

(*Reference is made to the Academic premium given to Grimelli for a memoir, "Sulla così detta Corrente della Rana," &c. in tom. x. of the Nuovi Commentarii, and the Academy proposed, as a continuation for* 1854, *another Tema on the "Corrente Muscolare," and concerning Du Bois-Reymond's theory.*)

Bologna Medical Society. Memorie della Società Medica di Bologna. *Bologna*

Bologna Società Medico-Chirurgica (Memorie della). Seguito degli Opuscoli da essa pubblicati. 4to. *Bologna*

Bologna Nuovi Annali delle Scienze Naturali. Dai Signori Alessandrini, Bertolini, Gherardi, e Ranzani. 30 vols. 8vo. *Bologna*, 1834-54

Boltzmann, Ludwig. Ueber die Bewegung der Elektricität in krummen Flächen. 8vo. 8 pp. (*Zuchold's Cat.* 1866-67. *Aus den Sitzungsberichten der Kaiserl. Akademie der Wissenschaften abgedruckt.*) *Wien*, 1865

† Ueber die elektrodynamische Wechselwirkung der Theile eines elektrischen Stromes von veränderlicher Gestalt. 8vo. 19 pp. 1 plate. (*Aus dem* lx. *Bde. der Sitzungsberichten der Kaiserl. Akad. der Wissenschaften, Abth.* ii. *Juni Heft*, 1869.) *Wien*, 1869

† **Bombay Magnetic Observatory.** Electrometer Observations (made by means of F. Ronalds's Atmospheric Apparatus). Fol. 1 p. *Bombay*, 1850

Observations for 1847, under the superintendence of C. W. Montriou. Part ii. 4to. *Bombay*, 1851

Bombay Magnetic Observatory—*continued.*

Observations (Magnetical and Meteorological) made at the Hon. East India Company's Observatory at Bombay, in the year 1849. 4to. *Bombay*, 1852

Observations (Magnetical and Meteorological) made at the Hon. East India Company's Observatory, Bombay, under the superintendence of E. F. T. Ferguson, for the years 1854 and 1855. 4to. *Bombay*, 1855-56

Vide also Orlebar.

† **Bompass,** Charles C. An Essay on the nature of Heat, Light, and Electricity. 8vo. 266 pp. *London*, 1817

Bona e Corner. Relazione dell' andamento ed effetti del Fulmine che colpì il Campanile . . . di S. Francesco della Vigna (in Venezia), l'anno 1780, 24 Maggio. 4to. 8 pp. *Venezia*, 1780

(*This title is abridged from that of an official report made by Bona and Corner, officers of Artillery.*)

Bonaparte, C. L., Principe di Musignano. Iconografia della Fauna Italica. Fasc. 12. *Roma*, 1835

Bonaparte, Louis Charles Napoléon. *Born April* 20, 1808, *at Paris; died Jan.* 9, 1873, *at Chislehurst, Kent.*

Sur la Théorie de la Pile Voltaique. 4to. (*Comptes Rendus*, xvi. 1843.) *Paris*, 1843

† Décret qui institue un Prix en faveur de l'Auteur des découvertes qui rendront la Pile de Volta applicable avec économie, soit à l'Industrie, comme source de chaleur, soit à l'Eclairage, soit à la Chimie, soit à la Mécanique, soit à la Médecine pratique. 8vo. 2 pp. *Paris*, 1852

(*This article is contained in the "Bulletin des Lois de la République Française,"* No. 497, p. 554. *The decree is dated 23d February*, 1852.)

Bonaparte, Premier Consul. Lettre au Ministre de l'Intérieur qui l'a transmise à . . . l'Institut. Ecrite le 26 Prairial, An. x. *Paris*, 1802

(*The annual galvanic prize medal of* 3,000 *francs value, and* 60,000 *francs as "encouragement" for an advance in electricity and galvanism comparable to that made by Franklin and Volta.*)

Bond. Apparatus for Astronomical Observations.

(*From Moigno. No particulars. "Présenté récemment à Ipswich. Employed at the Greenwich Observatory*, 1852.")

† **Bond,** B. R. The Hand-Book of the Telegraph; a Comprehensive Guide to Telegraphy, Telegraph Clerks' Remembrancer, and Guide to Candidates for Employment in the Telegraph Service. 12mo. 68 pp. *London*, 1864

Bond, Henry. On Two Magnetic Poles. 1646 (?)

(*Extract from page* 3 *of his work entitled "The Longitude Found," and refers to his statement in the Seaman's Kalender about* 30 *years since, i. e. in about* 1646. *The above title is probably not exact.*)

The Variations of the Magnetic Needle predicted for many years following. 4to. (*Phil. Trans.* 1668.) *London*, 1668

The Undertakings of Mr. H. Bond, a famous teacher of the art of navigation, in London, concerning the Variation of the Magnetical Compass and the Inclination of the Inclinatory Needle. 4to. (*Phil. Trans.* 1672.) *London*, 1672

On the Variation of the Magnetical Compass and the Inclinatory Needle; as the result and conclusion of 38 years' magnetical study. 4to. (*Phil. Trans.* an. 1673, p. 6065.) *London*, 1673

† On the Inclination of the Inclinatory Needle.

(*Churchman's Introduction*, p. 10, *says*, "*A small treatise in the time of Charles the Second, and dedicated to him.*")

Bond. (*Vide* Lovering and Bond.)

† **Bond,** Henry, Sen. The Longitude Found; or a Treatise shewing an Easie and Speedy way, as well by Night as by Day, to find the Longitude, having but the Latitude of the Place, and the Inclination of the Magnetical Inclinatorie Needle. Printed by the King's Majesties Special Command. sm. 4to. Dedication to Charles the Second, 3 pp. Epistle to the Reader, &c. 4 pp. The King's Licence, &c. 3 pp. Text, 65 pp. 7 woodcuts, each on a separate leaf. (*Scarce.*) **1676**

Bond, W. C. Description of the Electro-recording Apparatus in the Astronomical Observatory of Harvard College. Plate. (*History and Description of the Astronomical Observatory. Annals of ditto*, vol. i. part i. p. xlix.-lv.) **1856**

Bondioli, Pietro Antonio. *Born* 1765 *at Corfu; died September* 16, 1808, *at Bologna.*

† Sopra l'Aurora Boreale. Memoria letta nell' Accad. di Padova 15 Dec. 1790. 8vo. 25 pp. (*Volta's copy.*) **1790 (?)**

† Sopra l'Aurora Boreale. Memoria. 8vo. 11 pp. (*Giornale Fisico-Medico di Brugnatelli*, i. 55. *Letta nell' Accad. di Padova*, 1790.) *Pavia*, **1792**
(*This is a reprint of the above.*)

† Sopra le Aurore Boreali locali. Memoria. Presentata 19 Otto. 1801. 4to. 16 pp. (*Mem. Soc. Ital.* ix. 422.) *Modena*, **1802**

† Elogio di Pietro Antonio Bondioli scritto da M. Pieri. Inserito nel tom. xv. della Soc. Ital. Seconda ed. 8vo. *Treviso*, **1812**

† **Bonel,** A. Histoire de la Télégraphie. Description des principaux Appareils aériens et électriques. 12mo. 147 pp. plates. *Paris*, **1857**

Bonelli, G.

Vide Du Moncel.

† Du Télégraphe des Locomotives de G. Bonelli. Système destiné à prévenir les collisions sur les Chemins de Fer. 8vo. 16 pp. *Paris*, **1856**

† **Bonetti,** E. Di alcuni effetti dell' Elettrico sopra l'animale economia di G. Namias. 8vo. 5 pp. (*Giornale dell' I. R. Istit. Lombardo*, tom. iv. p. 214.) *Milano*, **1842**

Bonifas. (*Vide* Ducala-Bonifas, M.)

Bonijol, L. Verfertigte, unter anderen Instrumenten auch eins, mittelst dessen, durch atmosphärische Elektricität chemische Zersetzungen bewerkt werden. 8vo. (*Bibl. Univers.* xlv.) *Geneva*, **1830**

† **Bonnefoy.** De l'application de l'Electricité à l'art de guérir. Dissertation inaugurale . . . Collége Royal de Chirurgie à Lyon. Read 30th November, 1782. 8vo. 163 pp. *Lyon*, **1782**
(*There is also a German version.*)
De l'application de l'Electricité. *Lyon*, **1783**

† **Bonnejoy.** Les Moyens pratiques de constater la mort par l'Electricité à l'aide de la Faradisation. 8vo. 32 pp. *Paris*, **1866**

Bonnet, Charles. *Born March* 13, 1720, *at Genf.; died May* 20, 1793, *at Genthod b. Genf.*

Contemplazione della Natura. *Venezia*, **1797**
(*Elice Saggio, 2nd edition, p.* 29, *says that Bonnet* "*scrivera nell' anno* 1781, *che l'elettricità agisce sui nervi e sui muscoli . . . e che si riproducono in tal guisa le vibrazioni del cuore di una rana anche tre giorni dopo che è stato staccato dal di lei petto.*" Tom. i. p. 169. *Di Bonnet.*)

† **Bonnycastle,** C. On the Distribution of the Magnetic Fluids in masses of Iron; and on the Deviations which they produce in Compasses placed within their influence. 8vo. 11 pp. 1 plate. (*Phil. Mag.* lv. 446.) *London*, **1820**

Bonnycastle, C., and another. On Mr. Bonnycastle's Dissertation on the Influence of masses of Iron on the Mariner's Compass, published in our 55th volume. 8vo. 5 pp. (*Phil. Mag.* lvi. 346.) *London*, 1820

Bonvicini, J. De Electrico Fluido in naturam agente. Thesis. 4to. *Venezia*, 1791

Bonzi. (*Vide* Beccari and Bonzi.)

† **Boquillon.** De l'Electrotypie, A. M. Quesneville, directeur. 8vo. 48 pp. (*Extrait de la Revue Scientifique et Industrielle du Dr. Quesneville*, tom. xi. 1842.) *Paris*

Borch, Michael Johann, Graf. *Born June* 30, 1753, *at* (*N. St.*) *Warkland; died January* 10, 1811, *at* (*N. St.*) *Warkland.*

† Memoria sopra il Fosforo marino. 4to. 8 pp. (*Atti dell' Accad. di Siena*, vi. 1781, p. 317.) *Siena*, 1781

Borchers. Anwendung eines kräftigen Magnets zur Ermittelung der Durchschlagsrichtung zweier Gegenorter. *Clausthal*, 1864

Borde, Jean Baptiste de la. (*Vide* La Borde.)

Bordé, F. Trattato elementare di Elettricità accomodato all' intelligenza comune. 8vo. 174 pp. 1 plate. *Modena*, 1843

Bordeaux Academy. Recueil des Dissertations qui ont remporté le prix de l'Académie Royale. 6 vols. 12mo. *Bordeaux*, 1715-39

(*This recueil contains three dissertations only on electricity, and they are printed each with a separate title-page, and are sold separately. Vide Lozeran-du-Fech*, 1726; *Sarrabat*, 1727; *and Quelmalz*, 1753.)

Recueil des Dissertations qui ont remporté le prix de l'Académie Royale. 3 vols. 4to. *Bordeaux*, 1741-79

(*This recueil contains three dissertations on electricity, and they are printed and sold separately. Vide Desaguliers*, 1742; *Beraud*, 1748; *and Barberet*, 1750.)

Recueil des Ouvrages du Musée de Bordeaux. 1 vol. 8vo. 428 pp. *Bordeaux*, 1787

Séances de l'Académie Royale des Sciences, Belles Lettres, et Arts de Bordeaux. 8vo. Plates. *Bordeaux*, 1837

Recueil des Actes de l'Académie Royale de Bordeaux. Première Année, printed 1839, containing the "Actes" of 1838. *Bordeaux*, 1839-

Catalogue of the Library of the Imperial Academy. MS. fol. *Bordeaux, n. d.*

Bordeaux Chambre de Commerce. Catalogue des Livres composant la Bibliothèque de la Chambre de Commerce de Bordeaux, avec Supplément. 8vo. *Bordeaux*, 1852

Premier Supplément au Catalogue de la Bibliothèque de la Chambre de Commerce de Bordeaux, année 1855. Ouvrages reçus du 1 Jan. au 31 Déc. Fol. MSS. *Bordeaux*, 1855

Catalogue, containing additions. MSS. fol. *Bordeaux*

Catalogue of the Library of the Chamber of Commerce. No title. Unfinished. On cards. MSS. *Bordeaux*

Bordeaux Public Library. Catalogue. 8vo. *Bordeaux*, 1830

Supplément. 8vo. *Bordeaux*, 1847

† **Bordier,** Marcet. Notice d'un Fanal. 32 pp. 1 plate. *Paris*, 1823

† **Borelli,** G. Sull' Applicazione dell' Elettricità alla Navigazione. 8vo. 15 pp. 1 plate. *Torino*, 1855

Borenius, H. G. Om de framsteg som kunskapen om Jordmagnetismen gjort i synnerhet under de sednaste decennierna. 4to. 27 pp. (*Föredr. pa Finska Vetenskaps-Societetens årsdag den* 29 *April*, 1851. *Act. Soc. Fenn.* iii. 1852.) *Helsinfors*, 1852

Borgo, C. Vissuto dopo la metà del secolo, xviii.

(*In his work, "Analisi ed Esame ragionato dell' arte della fortificatura delle piazze," is described his invention, called the Cifraparlante, which is exactly the telegraph* (*messo in voga*) *after him.*)

Born (Edlen von Born). (*Vide* Prag.)

Borough, William. A Discours on the Variation of the Compas or Magneticall Needle, wherein is mathematically shewed the maner of the observation, effectes, and application thereof, made by W. B. And is to be annexed to the new Attractive of R. N. 1581. *London*, 1581

(*Note.—There is another edition, dated* 1585, *bound up with Norman*, 1585, *the preface bearing the same date as above.*)

Vide Norman, Robert.

Borc, d'Antic Paul. *Born* 1726, *at Pierre Segude, Languedoc; died June*, 1784, *at Paris.*

Mémoire sur la nature de la Matière électrique, et où l'on prouve que le verre n'est pas électrique par lui-même. 8vo. (*Mém. de l'Acad. de Dijon*, tom. ii. p. 29.) *Dijon*, 1774

Œuvres contenant plusieurs Mémoires sur l'art de la Verrerie, sur la Faiencerie, la Poterie, l'art des Forges, la Minéralogie, l'Electricité, et la Médecine. 2 vols. 12mo. *Paris*, 1780

Boscha, J., jun. Het behoud van arbeids-vermogen in den galvanischen Stroom, Eene voorlezing voorgedragen in het Natuurkundig Gezelschapte Utrecht, 15 Januarij, 1858. Meet aanteckeningen. 8vo. 119 pp. *Leyden*, 1858

Boscovich, Ruggiero Giuseppe. *Born May* 18, 1711, *at Ragusa; died February* 15, 1787, *at Mailand. Poggendorf*, i. 246.)

Dialoghi sull' Aurora Boreale. 4to. 47 pp. 1748 (?)

Sopra il Turbine. 8vo. *Roma*, 1749

Böse, C. H. Völlig entdecktes Geheimniss des Barth'schen Wetterparaskops. (*Reichs Anzeiger*, 1794.) 1794

Vide also Albanus and Böse.

Böse, Georg Matthias. *Born September* 22, 1710, *at Leipzig; died September* 17, 1761, *at Magdeburg.*

De attractione et electricitate, oratio inauguralis, quam in alma Matre Leucorea d. 17 Mart. 1738, Physicam ordinarie docturus habuit G. M. Böse. 4to. *Vitemburg*, 1738

(*Note.—In his "Tentamina Electrica" this is called "Commentarius Primus Oratio inauguralis," &c. habita d.* 17 March, 1738. *It is not said to be the first Commentary in the title-page.*)

Expériences sur l'Electricité. 4to. (*Mém. de Paris*, 1743, *Hist.* p. 45.) *Paris*, 1743

De Electricitate. Commentarius ii. quo simul ad capessendos honores magisteriales, et lauream poeticam invitabatur, 3 Novembre. *Wittembergæ*, 1743

† Tentamina Electrica in Academiis Regalis Londinensi et Parisina primum habita, omni studio repetita quæ novis aliquot accessionibus locupletavit Geo. Mat. Böse. 4to. 96 pp. *Wittembergæ*, 1744

(*This volume contains the Oratio inauguralis, or first Commentary, and the commencement of the second and third.*)

De Electricitate inflammante et beatificante. Commentarius iii. Mai. 1744. *Wittembergæ*, 1744

Die Elektricität nach ihrer Entdeckung und Fortgang mit poetischer Feder entworfen. 4to. *Wittenburg*, 1744

† Abstract of a Letter from Böse to De Maisan. Communicated by Baker from Ellis, and translated out of the Latin by Baker. Read May 23, 1745. 4to. 2 pp. (*Phil. Trans.* xliii. 419.) *London*, 1744-45

Discours sur la lumière des Diamants, prononcé à Leipzig le 12 Mai, 1745. 4to. 12 pp. *Göttingen*, 1745

† Recherches sur la cause et sur la véritable théorie de l'Electricité. A Messieurs de la Société Royale de Londres. 4to. 56 pp. *Wittemberg*, 1745

Recherches sur la cause et sur la véritable théorie de l'Electricité. 1746

Tentamina Electrica hydraulicæ . . . utilia. Pars posterior. 4to. *Wittemberg*, 1746

Böse, Georg Matthias—*continued.*

† Tentamina Electrica tandem aliquando hydraulicæ chymiæ et vegetabilibus utilia. Pars posterior. 4to. 47 pp. *Wittembergæ*, 1747

(*Note.—This volume contains his fourth and fifth Commentaries, the fourth written in* 1746. *Vide the 2nd page of his address.*)

† Extract of a Letter from G. M. Böse to W. Watson, on the Electricity of Glass that has been exposed to strong fires. Read April 6, 1749. 4to. (*Phil. Trans.* xlvi. 189.) *London*, 1749-50

Meteora heliaca, seu de maculis in sole deprehensis. *Lipsiæ*, 1754

L'Electricité, son origine et ses progrès. Poème traduit de l'Allemand par l'Abbé Joseph Ant. de C* * *. 12mo. 2 parts. 72 pp. *Leipzig*, 1754

(*This so-called translation is by Böse himself.*)

Meteora heliaca seu de maculis in sole deprehensis. *Lipsiæ* 1754

† * Sympathiam attractioni et gravitati substituit. . . . G. M. B. 4to. 20 pp. *Wittemburg*

De Terræ motus causis. *Viteb.* 1756

(*Vide* Anonymous, Electricity, 1744.)

† **Bosellini,** F. Spiegazione della Luce Boreale vedutasi il 16 Dec. 1737. 12mo. 27 pp. (*Calogera, Raccolta,* xvii. 141. *Before published.*) *Venezia*, 1738

Bosscha, J. Dissertatio inaugurata de Galvanometro differentiali. *Ludg. Bat.* 1854

Gleichzeitige Beförderung von drei oder vier Depeschen durch einen telegraphischen Leitungsdraht. (*Telegraphen-Vereins, Jahrg.* iii. s. 27 *und* 51, *aus Verslagen en Mededeelingen der Koninck. Acad. Dl.* iv.)

Bossi, Luigi. *Born February* 28, 1758, *at Milan; died April* 10, 1835, *at Milan.*

† Bolide . . . nel Lario, 18 Mar. 1834. 8vo. 4 pp. (*Bibliot. Ital.* lxxiii. 355.) *Milano*, 1834

Bostock, John. *Born* 1774 *at Liverpool; died August* 6, 1846, *in London.*

† An Account of the History and present State of Galvanism. 8vo. 164 pp. 2 plates. *London*, 1818

Boston. (*Vide* American Academy.)

Böttger, R. Beyträge zur Physik und Chimie. Eine Sammlung eigener Erfahrungen, Versuche und Beobachtung. 1 Heft. 8vo. *Frankfurt*, 1838

Idem. 2 Heft. Neuere Beiträge. 1841

Idem. 3 Heft. Materialien Vorlesungen. 1846

Ueber die Einrichtung und Behandlung der Dobereinerschen Zündmaschine. 2 Auflagen. *Sondershausen*, 1838

Mémoires où on trouve un mode d'argenture sur cuivre et laiton dans une solution ammoniacale d'azotate d'argent avec excès d'ammoniaque, à l'aide d'une pile distincte. (*L'Ami de l'Industrie de Frankfort, en Juillet*, 1840.) *Frankfort*, 1840

Bottis, G. Breve relazione degli effetti di un Fulmine che cadde in Napoli il mese di Giugno del presente anno 1774; e alcune considerazioni sopra i medesimi. 4to. 27 pp. *Napoli*, 1774

Botto, Giuseppe Domenico. *Born April* 4, 1791, *at Moneglia b. Genua.*

† Esperienze sull' azione chimica delle correnti indotte dal Magnetismo terrestre e dai ferro-elettro-magneti con alcune Osservazioni sulla loro trasmissibilità nei conduttori liquidi, e sui fenomeni del disco di Arago. 8vo. 20 pp. 1 plate. (*Faraday's copy.*) *Turin*, 1834

† Esperienze sull' azione chimica delle correnti indotte dal Magnetismo terrestre, e dai ferro-elettro-magneti con alcune Osservazioni. 8vo. 22 pp. 1 plate. (*Ext. Bibl. Univ.* lviii. 205.) *Torino*, 1834

† Note on the application of Electro-magnetism as a mechanical power. 8vo. (*Taylor's Scientific Memoirs*, vol. i. part iv. p. 532. *Bibl. Univ.* vol. lvi.) *London*, 1837

Botto, Giuseppe Domenico—*continued.*

Notizia sopra l'applicazione dell' Elettromagnetismo alla Meccanica. 8vo. 6 pp. *Torino,* 1834

† Expériences sur les rapports entre l'induction électromagnétique et l'action électrochimique, suivies de considérations sur les machines électromagnétiques. Lu 15 Février, 1842. 4to. 18 pp. (*Mém. Torino,* 2nd series.) *Turin,* 1843

† Sur les lois de la chaleur degagée par le courant voltaïque et sur celles qui régissent le développement de l'Electricité dans la pile. Lu 9 Février, 1845. 4to. 18 pp. (*Acad. de Turin,* serie ii. tom. viii.) *Turin,* 1845

† Note sur un nouveau système de Télégraphie électrique. 4to. 4 pp. (*Poggendorff says Mém. Turin,* xi. 1851.) *Turin, n. d.*

† **Botto et Avogadro.** Mémoire sur les rapports entre le pouvoir conducteur des liquides pour les courants électriques et la décomposition chimique qu'ils en éprouvent. 4to. 39 pp. 1 plate. *Turin,* 1839

Boucher. (*Vide* Le Boucher.)

Boudet, P. Guide de l'Expéditeur des Dépêches Télégraphiques, avec les tarifs, pour la France et l'étranger. 12mo. *Paris,* 1869

† **Boudin.** Histoire physique et Médicale de la Foudre, et de ses effets sur l'homme, les animaux, les plantes, les édifices, les navires. 8vo. 31 pp. (*Ext. Annales d'Hygiène, &c.*) *Paris,* 1854

† De la Foudre considérée au point de vue de l'Histoire, de la Médecine légale, et de l'Hygiène publique. 8vo. 50 pp. *Paris,* 1855

† Histoire de la Foudre et des Paratonnerres. 8vo. 57 pp. cuts. (*Ext. Annales d'Hygiène.*) *Paris,* 1855

Boué, A. Chronologischer Katalog der Nordlichter bis zum J. 1856, sammt einer Bibliographie über diese Erscheinung. 8vo. 74 pp. (*Aus den Sitzungsberichten* 1856 *der Kaiser. Akad. der Wissenschaften.*) *Wien,* 1857

† Parallele der Erdbeben, der Nordlichter, und des Erdmagnetismus, sammt ihren Zusammenhang mit dem Erdplastik, &c. 8vo. 75 pp. (*Aus den Sitzungsberichten der Kaiserl. Akad. der Wissenschaften,* xxii. 8, 323.) *Wien,* 1857

† Etwas über Vulkanismus und Plutonismus in Verbindung mit Erdmagnetismus, sowie eines Aufzählungs-versuchs der submarinischen brennenden Vulkane. 8vo. 39 pp. (*Sitzungsb. der Mathem.-naturn.* Cl. lix. 1 Abth.) *Wien,* 1869

† Ueber das gefürbte Seewasser und dessen Phosphorescenz im Allgemeinen. 8vo. 12 pp. (*Sitzungsb. der Mathem.-naturn.* Cl. lix. 2 Abth.) *Wien,* 1869

† Ueber die Geologie der Erdoberfläche, in Rücksicht auf die Vertheilung der Temperatur, der Aërolithen und der Oceane. 8vo. 47 pp. (*Sitzungsb. der K. Akad. Wien,* 1850, 1 Heft, p. 59.) *Wien,* 1850

† Chronologische Catalogue der Nordlichter bis zum Jahre 1856, sammt einer Bibliographie über diese Erscheinung. Vorgelegt im Januar, 1856. 8vo. 72 pp. (*Sitzungsberichte der K. Akad. der Wissenschaften,* vol. xxii. 1 Heft.) *Wien,* 1856

Bougainville, Louis Antoine, Comte de. *Born November* 11, 1729, *at Paris; died August* 31, 1811, *at Paris.*

† Some particulars of the Life of Count Bougainville. By M. Delambre. 8vo. 8 pp. (*Phil. Mag.* xliii. 371.) *London,* 1814

Journal de la Navigation autour du Globe de la frégate la Thétis et de la corvette l'Espérance, pendant les années 1824-5-6. Publié par ordre du Roi. Par M. le Baron de Bougainville, Cap. de Vaisseau, et Chef de l'Expédition. 2 vols. 4to. and atlas of 56 plates. vol. i. 742 pp. vol. ii. 351 pp. Vol. ii. has an additional title-page, and is edited by Ed. de la Touanne, lieutenant de la Thétis. Astronomical and Meteorological Observations in 2nd part of vol. ii. 165 pp., declinations included. 1837

Bouguer, Pierre. *Born February* 16, 1698, *at Croisic, Basse-Bretagne; died August* 15, 1758, *at Paris.*

Bouguer—*continued.*

† Remarques sur le Mémoire de M. Meynier touchant la meilleure Méthode d'observer sur mer la déclinaison de l'aiguille aimantée. 4to. 7 pp.
(*Meynier's Mémoire is dated* 1732.)

† De la Méthode d'observer en mer la déclinaison de la Boussole. A remporté le Prix 1731. 4to. 67 pp. *Paris*, 1731
(*Bound with it is his undated work, 7 pages, "Remarques sur le Mémoire de M. Meynier touchant la meilleure Méthode d'observer sur mer la déclinaison de l'aiguille aimantée." This* (*Bouguer*) *is in the Pièces de Prix de l'Acad. de Paris,* ii. *Mém.* 6.)

† Traité de Navigation, contenant la théorie et la pratique du pilotage. 8vo. 422 pp. *Paris*, 1753

Vidit in America flammas e montibus exsilientes, dum certæ nubes (nimirum defectu electricæ) contra eosdem vento ferrentur. 4to. (*Mém de l'Acad. an* 1755, p. 281.) *Paris*, 1755

Traité de Navigation. (*From Van Swinden*, vol. ii. p. 101.)

Voyage au Pérou (p. 48.)
(*Note.—On the temperature of the atmosphere, at various heights, in reference to the formation of hail.*)

Bouilhet, H. Mémoire sur le Cyanure double de potassium et d'argent et sur son rôle dans l'argenture électro-chimique. 8vo. (*Ann. de Chim. et de Phys.* 3rd series, xxxiv. *Paris*

Bouillet, J. Description d'une Aurore Boréale singulière dans ses effets. 4to. (*Mém de Paris*, 1730.) *Paris*, 1730

De l'état des connaissances relatives à l'Eléctricité chez les anciens peuples de l'Italie. 8vo. 31 pp. *Saint Etienne*, 1862

Bouillon, Marquis de. His Mosaic Gold for Electric Rubbers. 4to. (*Observ. de Phys.* xxi.) *Paris*

Boulangé. (*Vide* Le Boulangé.)

Boullanger (or Anonymous). Mémoire sur l'Electricité. 8vo. 37 pp. (*Vide Nollet Essai*, 2nd edition, pp. 217, 240, 242.) *Paris*, 1746

Suite du Mémoire sur l'Electricité. 8vo. 30 pp. *Paris*, 1748

Lettre à l'Abbé Nollet sur l'Electricité. 8vo. 45 pp. *Londres*, 1749
(*For evidence of this work being by Boullanger vide page* 8 *of it.*)

† **Boullangère.** Traité de la cause et des phénomènes de l'Electricité. 2 vols. 8vo. *Paris*, 1750

† **Boulu.** Traitement des Adénites cervicales chroniques au moyen de l'Electricité localisée. 8vo. 31 pp. (*Extrait du Rapport lu à l'Acad. Imp. de Méd. le* 22 *Ap.* 1856.) *Paris*, 1856

† **Bourdon,** M. A. Account of a Shower of Stones; in a Letter from the Prefect of the Department of Vaucluse to the French Minister of the Interior, dated November 10, 1803. 8vo. 4 pp. (*Phil. Mag.* xvii. 271.) *London*, 1803

† **Bourdonnay,** Duclésio. Sur la distribution de l'Electricité à la surface des corps conducteurs. Thèse. 4to. 44 pp. *Paris*, 1840

Bourges, Secrétaire de l'Acad. de Bordeaux. Rapport sur les travaux de l'Académie, Séance 1835, 10 Sept. 8vo. (*Séances de l'Académie de Bordeaux pour* 1835, p. 48.) *Bordeaux*, 1835
(*Note.—Contains mention of Vallot's "Résultats;" amongst others, "Le Rapport qui existe entre la pierre nommée par Pline Carchedoine* (*sic*) *et la Tourmaline."*)

Rapport sur les travaux de l'Académie, Séance 1837, 22 Sept. 8vo. (*Séances de l'Académie de Bordeaux pour* 1837, p. 83.) *Bordeaux*, 1837
(*Note.—Contains notices of two memoirs, as replies to a prize question on Lightning-conductors. The first is an anonymous one, which speaks of the forms of roofs and of metallic masses spread over the edifice, &c. The second is by Mermet, of Pau, who received a gold medal, but not the prize.*)

Bourges—*continued.*

Rapport sur les travaux de l' Acad. 1r Trimestre 1838. 8vo. (*Actes de l'Acad. de Bord. pour* 1838, p. 84.) *Bordeaux*, 1839

(*Note.—Contains mention of Gachet's Notice sur deux échantillons de météorolites, one of which was from the meteorolite mentioned by Brard.*)

† **Bourgoin,** Edme. Electrochimie. Nouvelles recherches électrolytiques. 8vo. 36 pp. (*Ecole supericure de Pharmacie de Paris.*) *Paris*, 1868

Bourgouet. Rapport sur des expériences d'Electricité galvanique fortifiée. 8vo. (*Journal de Chim. de Van Mons*, No. iv. p. 73.) *Bruxelles*

(*Vide* also Prevost, P.)

† **Boussac,** A. Précis de Télégraphie électrique et des connaissances mathématiques, physiques, et chimiques indispensables pour la télégraphie. 8vo. 503 pp. *Paris*, 1868

Boussingault. Expériences constatant l'efficacité des Lampes de Davy. Emploi de la lumière produite par la pile dans les lieux où l'atmosphère est sujette à devenir détonnante. 4to. (*Comptes Rendus*, xxi. 515.) *Paris*, 1845

Remarques à l'occasion d'une communication de M. Louyet sur l'emploi de la lumière produite par la pile pour l'éclairage des mines. 4to. (*Comptes Rendus*, xxii. 225.) *Paris*, 1846

Boussland. (*Vide* Humboldt and Boussland.)

Bouvier, de Jodoigne. Extrait d'une Lettre sur la substitution de la Pile de Volta au briquet physique. 8vo. (*Journal de Van Mons*, No. xl. p. 237.) *Bruxelles*

Expériences sur le remplacement des corps humides par une couche mince d'air dans la pile de Volta. 8vo. (*Journal de Van Mons*, No. xii. p. 300.) *Bruxelles*

† **Bowditch,** N. An Estimate of the height, direction, velocity, and magnitude of the Meteor that exploded over Weston, in Connecticut, Dec. 14, 1807. 4to. 24 pp. (*Mem. Amer. Acad.* old series, iii. part ii. p. 213.) *Cambridge, U.S.* 1815

† On the Variation of the Magnetic Needle. 4to. 7 pp. (*Mem. Amer. Acad.* old series, iii. part ii. p. 337.) *Cambridge, U.S.* 1815

† On the Method of computing the Dip of the Magnetic Needle in different latitudes, according to the theory of Biot. 4to. 5 pp. (*Mem. Amer. Acad.* old series, iv. part i. p. 57.) *Cambridge, U.S.* 1818

† On a Mistake which exists in the calculation of M. Poisson relative to the distribution of the electric matter upon the surfaces of two globes, in vol. xii. of the Mémoires de la Classe des Sciences Mathématiques et Physiques de l'Instit. Impérial de France. 4to. 2 pp. (*Mem. Amer. Acad.* old series, iv. part i. p. 307.) *Cambridge, U.S.* 1818

† On the Meteor which passed over Wilmington, in the state of Delaware Nov. 21, 1819. 4to. 11 pp. (*Mem. Amer. Acad.* old series, iv. part i. p. 295.) *Cambridge, U.S.* 1818

Vide also Dutrochet and Bowdich.

† **Bowdoin,** Js. Observations upon an hypothesis for solving the phenomena of Light; with incidental Observations, tending to show the heterogeneousness of Light, and of the Electric Fluid, by their intermixture or union with each other. 4to. (*Mem. Amer. Acad.* i. 187.) *Boston*, 1785

Boyle, Hon. Robert. *Born January 25, 1627, at Lismore, County Cork, Ireland; died December 30, 1691, in London.*

New Experiments concerning the relation between Light and Air in Shining Wood and Fish. 4to. (*Phil. Trans.*) *London*, 1667

Some Observations about Shining Fish. 4to. (*Phil. Trans.* 1672.) *London*, 1672

Experiments and Notes about the Mechanical Origin or Production of particular qualities, in several Discourses on a great variety of subjects, and, amongst the rest, of Electricity. 1676

The Aërial Noctiluca; or, some New Phenomena, and a process of a fictitious self-shining substance. 8vo. *London*, 1680

Boyle—*continued.*

Experiments and Observations made upon the Icy Noctiluca; to which is annexed a Chymical Paradox, grounded on new experiments, making it probable that chemical principles are transmutable. 12mo. (*R. S. Cat. of* 1839, p. 297.) *London*, 1681-82

Experimenta et Observationes Physicæ, &c. 1691

† Philosophical Works, abridged by Shaw, ii. 506. 3 vols. small 4to. *London*, 1725

Bozolus (Professor, in Roma). On Discharge of the Leyden Jar as the active principle of the Electric Telegraph.

(*Vide Mariani, from a Memorandum given to me by Cavaliere Zantedeschi.*—F. R.) *Roma*, 1767

Brachet. *Vide* Becquerel and Brachet.

† **Brachet,** A. Solutions de l'éclairage Electrique produit par les courants de la pile. 8vo. 8 pp. *Paris*, 1858 (?)

† **Brae,** A. E. Electrical Communication in Railway Trains. The causes considered which have hitherto prevented its successful application. 4to. 36 pp. 4 plates *London*, 1865

† **Bragadin** (or Anonymous). Dubbii sull' efficacia de' Conduttori elett. 8vo. 122 pp. 1 plate. *Venezia*, 1795

† Risposta dell' autore dei Dubbii sull' efficacia dei Conduttori, alla giunta al Giornale Astrometeorologico del . . . Toaldo. (No title-page.) 8vo. 31 pp.

† **Brame,** E. Etude sur les Signaux des Chemins de Fer à double voie. Large 8vo. 262 pp. atlas of 18 plates folio. *Paris*, 1867

Brand. On Attraction of mixtures of Iron and Gold, Silver, Copper, Lead, &c. by the Magnet, and effect of Antimony. 8vo. (*Abhand. der Schwed. Akad.* xiii. 212.) *Hamburg, n. d.*

Brande, W. T. Experiments on the Effects of the Galvanic Current on Albumen. 4to. (*Phil. Trans.* 1809.) *London*, 1809

† On some Electro-chemical Phenomena. 8vo. 7 pp. 1 plate. (*Phil. Mag.* xliv. 124.) *London*, 1814

† Electro-chemical Decomposition of the Vegeto-alkaline Salts. 8vo. (*Phil. Mag. or Annals*, ix. 237.) *London*, 1831

The Dictionary of Science, Literature, and Art. Fourth edition, re-edited by the late W. T. Brande (the author) and George W. Cox, M.A. 3 vols. 8vo. *London*, 1872

Brande. (*Vide* Klingenstierna and Brande.)

† **Brandely,** A. Nouveau Traité des manipulations Electro-chimiques appliquées aux arts et à l'industrie. 8vo. 146 pp. 6 plates. *Paris*, 1848

† Die Operationen, Manipulationen und Geräthschaften der Electro-chemie in ihrer Anwendung auf Gold- Silber- und Bronce-arbeiten, Galvanoplastik und andere verwandte Gewerbe. Aus dem Französischen bearbeitet. 8vo. 179 pp. 10 plates.) *Weimar*, 1849

† **Brander,** Georg Friedrich. *Born November* 28, 1713, *at Regensburg; died April* 1, 1783, *at Augsburg.* Beschreibung eines magnetischen Declinatorii und Inclinatorii. 8vo. 72 pp. 2 plates. *Augsburg*, 1779

Brandes, Carl W. T. Sternschnuppen Beobachtungen im Aug. 1833 und deren Berechnung. (*Astronomische Nachrichten*, xvii. 1840.) 1840

Brandes, Heinrich Wilhelm. *Born July* 27, 1777, *at Groden bei Ritzebüttel; died May* 17, 1834, *at Leipzig.* Ueber Sternschnuppen. 8vo. (*Voight's Mag.* vi. 1803.) *Jena o. Weimar*, 1803

Ueber die Geschwindigkeit, mit der ein vom Mond geworfn. Körper auf der Erde ankommen kann. 8vo. (*Voight's Mag.* v. 1803.) *Jena o. Weimar*, 1803

Ueber Feuerkugeln. 8vo. (*Voight's Mag.* v. 1803.) *Jena o. Weimar*, 1803

Ueber die Abweichung nach Westen bei steilrecht geschossenen Kugeln. 8vo (*Voight's Mag.* ix. 1805.) *Jena o. Weimar*, 1805

Ueber die Oscillationen der Drehwaage bei Coulomb's Versuchen. 8vo. (*Voight's Mag.* xii. 1806.) *Jena o. Weimar*, 1806

Brandes, Heinrich Wilhelm—*continued.*

Anleitung zu Sternschnuppen Beobachtungen. 8vo. (*Gilbert's Ann.* lxii. 1819.) *Leipzig,* 1819

Beiträge zur Witterungskunde, &c. *Leipzig,* 1820

Wie die anziehenden und abstossenden elektrischen Kräfte von der Entfernung abhängen. 8vo. (*Schweigger's Journal,* xxxv. 1822.) *Nürnburg,* 1822

Gesetzmässigkeit in der Bewegung der Sternschnuppen. 8vo. (*Poggendorff, Annal.* ii. 1824.) *Leipzig,* 1824

Beobachtungen über die Sternschnuppen, angestellt von mehreren Naturforschern und mit Untersuchungen über die Resultate derselben. 8vo. *Leipzig,* 1825
(*Note.—This is the first vol. of his Unterhaltungen für Freunde der Physik und Astronomie, of which work there are three vols.*)

Gesetzmässigkeit in der Bewegung der Sternschnuppen. 8vo. (*Poggendorff's Ann.* vi. 1826.) *Leipzig,* 1826

† Ueber Sternschnuppen. 8vo. (*Gilbert's Ann.* vi. viii. xiv. xviii. xxxvii. xlii. xlvii. lviii. lxii. lxxiii. lxxv.) *Leipzig*

† **Brandes,** R. Examination of a Gelatinous Substance found in a damp meadow; as a contribution to the knowledge of Meteors called Shooting Stars. 8vo. 7 pp. (*Schweigger's Jahrbuch der Chem. N. R.* xix. 389. *Phil. Mag. or Annals,* iii. 271.) *London,* 1828

† **Branville,** P. de. Mémoire sur la pose des Cables sous-marins et sur les opérations préliminaires qui s'y rattachent. 8vo. 32 pp. (*Ext. des Mém. de la Soc. des Ingén. Civils.*) *Paris,* 1858

(*Vide* also Balestrini.)

Brard, Cyprian Prosper. *Born November* 21, 1788, *at l'Aigle, dép. Orne; died November* 28, 1838.

Note sur une masse de Fer météorique. (*Bordeaux Acad. Sciences* 1829, p. 39.) 1829

† **Brasack,** F. Das Luftspectrum: eine prismatische Untersuchung des zwischen Platina-Elektroden überschlagenden elektrischen Funkens. 4to. 42 pp. 1 plate. (*Aus der Abhandlung der Natur. Gesellschaft zu Halle,* x. *besonders abgedruckt.*) *Halle,* 1866

Brasseur, A. J. Enseignement de la vraie doctrine du Magnétisme. Les principes expliqués d'après les effets. Mémoire adressé à l'Académie des Sciences. 12mo. 14 pp. *Paris,* 1860

Braun, C. J. H. E. Ueber das Nordlicht. *Nürnberg,* 1858

Braun, Josias Adam. *Born* 1712, *at Assche, südl. Brab.; died October* 3, 1768, *at St. Petersburg.*

Observationes Meteorologicæ factæ Petropoli An. 1755 et consectaria. 4to. (*Novi Comment. Acad. Petrop.* vii. 388.) (*Vide Van Swinden, Recueil,* iii. 125, *on Atmospherico-Electrical Influence on the Needle.*) *Petropoli*

† **Braun,** J. S. Ueber die Anwendung des Lichts und der Elektricität in der Telegraphie, und der Construction electrischer Telegraphen. 4to. 38 pp. *Altenburg,* 1849

† **Bravais,** Auguste. *Born August* 28, 1811, *at Annonay, dép. Ardèche.*

Sur les Aurores Boréales vues à Bossekop et á Jupvig en 1838 et 1839 pendant le voyage de la Commission . . . du Nord. 8vo. 119 pp. 2 plates. (*Ext. des Voyages en Scandinavie, en Laponie, &c. Division, Aurores Boréales.*) (*Vide Gaimard.*) *Paris,* 1846

† Sur les variations de l'intensité magnétique horizontale observés à Bossekop en 1838 et 1839 pendant le voyage de la Commission Scientifique du Nord. 8vo. 60 pp. 1 plate. (*Ext. de Voyage en Scandinavie, &c. Division Magnétisme terrestre.*) *Paris,* 1847

† Historique des hypothèses faites sur la nature et la cause des Aurores Boréales. 8vo. 30 pp. (*Ext. des Voyages en Scandinavie, &c. Division Magnétisme terrestre,* tom. iii.) (*Vide Gaimard.*) *Paris,* 1856

Bravi. Sulla cagione dei venti irregolari ; con Appendice. *Bergamo*, 1831

Breda, Jacob van. Verhandeling over de Electriciteit van den Dampkring. (*Verhand. Maatsch. Harlem*, iv. 1788, *gekrönt von dieser Gesellschaft.*) *Haarlem*, 1788

Proewen genomen med twee elektrophores van verschillende soort, om de outekken met welke doorgans de meeste elektriciteit kon de verwekt worden. (*Allgemeene Vaderlandsche Letteroefeningen.*) *Haarlem*, 1799

Bredenberg, C. G. Bemerkungen vom rechten Gebrauche des Compasses, bey Aufsuchung der Eisenerze. 8vo. 2 pp. (*K. Schwed. Akad. Abhand.* xxii. 74.) *Hamb. v. Leipzig*, 1760

† **Breguet** et **Betancourt.** Nouveau Télégraphe. (*Vide* Lagrange, Laplace, &c. Rapport.)

Breguet, Louis François Clément. *Born December* 22, 1804, *at Paris.*

Note sur un Appareil destiné à mesurer la vitesse d'un projectile dans différents points de sa trajectoire. 4to. (*Comptes Rendus*, xx. 157.) *Paris*, 1845

Remarques sur un passage qui se rapporte à la Communication (sur un appareil) dans une Note de M. Wheatstone sur le Chronoscope électromagnétique. 4to. (*Comptes Rendus*, xx. 1712.)

Note.—Moigno says *Séance de l'Acad. du* 9 Juin, 1845. *Paris*, 1845

† Sur la Télégraphie Electrique. 4to. (*Comptes Rendus*, xxi. 1119.) *Paris*, 1845

Expériences faites au Télégraphe Electrique de Rouen. 4to. (*Comptes Rendus*, xxii. 743.) *Paris*, 1846

Remarques sur une modification dans la Construction des Télégraphes Electriques, recemment proposée par M. Dujardin. 4to. (*Comptes Rendus*, xxiii. 880.) *Paris*, 1846

Remarques à l'occasion d'une réclamation de priorité élevée par M. Morse concernant les Télégraphes Electriques. 4to. (*Comptes Rendus*, xxiii. 937.) *Paris*, 1846

Appareil Electromagnétique pour le Télégraphe de Saint Germain. 4to. (*Comptes Rendus*, xxiii. 1082.) *Paris*, 1846

De l'induction par différents Métaux. 4to. (*Comptes Rendus*, xxiii. 1155.) *Paris*, 1846

Moniteur Electrique pour les Chemins de Fer. 4to. (*Comptes Rendus*, xxiv. 428.) *Paris*, 1847

Sur un accident arrivé au télégraphe de Saint Germain. 4to. (*Comptes Rendus*, xxiv. 980.) *Paris*, 1847

Appareils destinés à indiquer la vitesse, à chaque instant, du parcours d'un convoi sur Chemin de Fer ; et la durée du séjour dans les stations. 4to. (*Comptes Rendus*, xxix. 740.) *Paris*, 1849

Réclamation de priorité au sujet des Chronomètres à pointage de M. Abm. Louis Breguet. 4to. (*Comptes Rendus*, xxx. 206.) *Paris*, 1850

Manuel de Télégraphie Electrique. 1st edition. 12mo. *Paris*

Manuel de Télégraphie Electrique à l'usage des employés des Chemins de Fer. 12mo. *Paris*, 1851

Sur un Télégraphe Electrique mobile. 4to. (*Comptes Rendus*, xxxiv.) *Paris*, 1852

Sur les Télégraphes Electriques. 4to. (*Comptes Rendus*, xxxiv.) *Paris*, 1852

† Manuel de Télégraphie Electrique, 2nd edition. 12mo. 2 plates. *Paris*, 1853

Manuel de Telegrafia Electrica para el uso de los empleados en los caminos de hierro. Edicion Española, publicada por D. Balbino Cortés. 4to. 88 pp. 1 plate. *Madrid*, 1855

† Manuel de Télégraphie Electrique à l'usage des employés des Chemins de Fer. Revue et augmentée. 3rd edition. 12mo. 107 pp. 3 plates, and cuts. *Paris*, 1856

† Manuel de Télégraphie Électrique. Quatrième édition, revue, corrigée, et augmentée. 12mo. 252 pp. 4 plates. *Paris*, 1862

Breguet—*continued.*

Nouveau Transformateur. (*Vide* Du Moncel.)

† Télégraphie domestique. Instruction sur la pose . . . des Sonnettes électriques. 12mo. 61 pp. *Paris*, 1865

(*Vide* also Anon. Electric Telegraph, 1865.)

(*Vide* also Masson and Breguet fils.)

† **Breguet** et **Séré** (V. de) Télégraphe électrique, son avenir. Poste aux lettres électriques, Journaux électriques, suivi d'un aperçu theorique de la télégraphie. 8vo. 75 pp. *Paris*, 1849

Breitinger, David, Sen. *Born Nov.* 17, 1737, *at Schönholzerswyler, Thurgau; died Jan.* 30, 1817, *at Zurich.*

Reflexionen ob es wohl gerathen wäre, Strahlenableiter in unserer Stadt Zürich einzuführen. *Zurich*, 1776

Nachricht über das Einschlagen des Blitzes in einen Wetter-ableiter, nebst Berichtigung einiger Begriffe über die Wirkung der Ableiter. *Zurich*, 1786

† Ragguaglio d'un Fulmine caduto in un Conduttore. 4to. 8 pp. (*Opuscoli Scelti*, ix. 210.) *Milano*, 1786

Instruction für diejenigen, welche sich mit der Verfertigung und Visitation der Blitzableiter befassen. *Zurich*, 1825

Instruction über Blitzableiter im Canton Zürich. 4to. *Zurich*, 1830

† **Breintnall,** Jos. Notices of some Meteors observed at Philadelphia, extracted out of a Letter from him to P. Collinson, dated Philadelphia, May 9, 1738. 4to. 2 pp. (*Phil. Trans.* xli. 359.) *London*, 1739-41

Bremond, François de. *Born Sept.* 14, 1713, *at Paris; died March* 21, 1742, *at Paris.*

† Extract of a Letter from De Bremond to Mortimer, concerning a File rendered magnetical by Lightning. Translated from the French by T. S. Dated Paris June 4, 1740. 4to. 3 pp. (*Phil. Trans.* xli. 614.) *London*, 1739-41

Expériences Physico Mécaniques sur différens Sujets, et principalement sur la Lumière et l'Électricité, produites par le frottement des Corps. Traduites de l'Anglais de M. Hawksbee par feu M. de Bremond, de l'Acad. Royale des Sciences. Revues et mises au jour, avec un Discours préliminaire, des Remarques et des Notes, par M. Demarest. 2 vols. 8vo. *Paris*, 1754

† **Brenner.** Weitere Mittheilungen zur Elektrootiatrik. Separat-Abdruck aus der Petersb. med. Zeitschrift. 4to. 26 pp. *Petersburg*, 1863

† Zur Elektro-physiologie und Elektro-pathologie des Nervus acusticus. Separat-Abdruck aus der Petersb. medische Zeitschrift. 4to. 11 pp. *Petersburg*, 1863

† **Brenner,** R. Untersuchungen und Beobachtungen auf dem Gebiete der Elektrotherapie. 2 vols. 8vo. *Leipzig*, 1868-9

† **Brenta,** L. Fenomeni della visione . . . Descrizione di Pratici Esperimenti comprovanti la Forza attraente e respingente Elettro-magnetica entro l'occhio . . . 8vo. 39 pp. 3 plates. *Milano*, 1838

† Elettro-magneto-tipia . . . 8vo. 91 pp. 1 plate and portrait. *Milano*, 1840

Brera, V. L. Giornale di Medicina pratica, compilato da V. L. Brera. 12 vols. 8vo. (*Vide* also Brugnatelli and Brera.) *Padova*, 1812-17

Brescia Academy and Athenæum. (*Vide* Commentarii dell' Accad. . . . del Dipartimento, &c.)

Breslau Academy. Miscellanea curiosa, seu Ephemerides Medico-physicæ Academiæ Naturæ Curiosorum. 24 vols, 4to. *Norimb.* 1670-1706

Ephemerides Academiæ Cæs. Naturæ curiosorum, &c. 5 vols. 4to. *Norimb.* 1712-22

Breslau Academy—*continued.*

Acta Physico-medica Acad. Cæs. Leopoldino-Carolinæ Nat. Curios. 10 vols. 4to. *Norimb.* 1727-54

Nova Acta Physico-medica Acad. Cæs. Leopoldino-Carolinæ Nat. Curios. 8 vols. 4to. *Norimb.* 1754-91

† Verhandlungen der Leopoldino-Carolinæ Academiæ d. Naturforcher. 1 vol. 1818—*continued.*

Bressy, Joseph. Essai sur l'Electricité de l'Eau. 8vo. 178 pp. 2 plates. *Paris,* 1797

Breton. Nouvel Appareil Electro-magnétique. 4to. (*Comptes Rendus,* viii. 499, and ix. 242.) *Paris,* 1839

Breton Frères. Notice sur quelques perfectionnements apportés à un Appareil Electrique destiné à l'usage des Médecins. 4to. (*Comptes Rendus,* xviii. 527.) *Paris,* 1844

† **Breton et Beau de Rochas.** Théorie mécanique des Télégraphes sous-marins. Recherches sur les conditions de leur établissement. 8vo. 72 pp. 2 plates (*Ext. des Annales Télégraphiques,* Sept. et Oct. 1859.) *Paris,* 1859

† **Brett,** J. W. On the Origin and Progress of the Oceanic Telegraph, with a few brief Facts and Opinions of the Press. 8vo. 104 pp. *London,* 1858

(*Vide* also Patents.)

† **Brett and Little.** Compendium of the Improvements effected in Electric Telegraphs by Messrs. Brett and Little, with a description of their patent Electro-telegraphic Converser. . . 8vo. 64 pp. illustrated. *London,* 1847

Brettes. (*Vide* Martin de Brettes.)

Brewer and Delaroche. Essai sur le Galvanisme. Extrait du 8e vol. de la Bibliothèque Germanique Médico-chirurgicale. 8vo. *Paris,* 1802

(*This is their account of Grapengeiser's* "Recherches sur le Galvanisme," *translated from his* "Versuche.")

Brewster, Sir David. *Born Dec.* 11, 1781, *at Sedburgh, Roxburghshire, Scotland; died*

The Edinburgh Encyclopædia of Science, Literature, and Art. 18 vols. 4to. 533 plates. *Edinburgh,* 1810-30

† A Treatise on Magnetism, forming an Article in the 7th Edition of the Encyclopædia Britannica. 8vo. 363 pp. *Edinburgh,* 1838

A popular Treatise on Magnetism, from the 7th Edition of the Encyclopædia Britannica. 8vo. 107 illustrations. (*From Latimer Clark's Cat.*) *Edinburgh,* 1851

† On the Optical Phenomena and Crystallisation of Tourmaline, Titanium, and Quartz, within Mica, Amethyst, and Topaz. 4to. 7 pp. 1 plate. (*Faraday's copy.*) (*Trans. Royal Society, Edinburgh,* xx. Part iv.) *Edinburgh,* 1853

† Electricity. Article in the Encyclopædia Britannica, vol. viii. p. 523. 4to. 8th edition. 104 pp. 9 plates. *Edinburgh,* 1855

† On the Life Boat, the Lightning Conductor, and the Light-house. 8vo. (*North British Review,* xxxii. 492. November, 1859.) 1859

† Galvanism. (*Edinburgh Encyclopædia,* vol. iv. p. 173.)

† Article on Electricity. 4to. 7th edition. 100 pp. 8 plates. (*Encyclopædia Britannica,* viii. 565.) *London.*

(*This article is signed N. N. N.*)

† Article on Voltaic Electricity. 4to. 7th edition. 37 pp. (cuts.) (*Encyclopædia Britannica,* vol. xxi.) *London*

† Photographic Portrait of Sir David Brewster.

Vide Edinburgh Philosophical Journal.
„ Edinburgh Journal of Science. New Series.
„ London and Edinburgh Philosophical Magazine.
„ Ferguson (James) and Brewster.
„ Robison and Brewster.

Brézé, De. (Il Marchese.) Description de trois Machines Physico-chimiques. About 1784

(*The editors of the* "Opuscoli" *give a description of two of the machines, and refer to this book. One is an eudiometer, acting by the electric spark, exactly in Davy's manner.*)

Briand. L'Electricité appliquée au Traitement curatif des Névralgies, des Rhumatismes, des Paralysies, &c. 12mo. 130 and 6 pp. *Paris et Rennes*, 1855

Brierre de Boismont. Diagn. Untersuchungen verschiedener Arten der allgemeinen Lähmung mittelst der localisirten Galvanisation. (*Annal Med. Phys.* 1850.) 1850

† **Briggs,** C. F., and **Meverick.** The Story of the Telegraph and History of the great Atlantic Cable. 8vo. 255 pp. Portrait and map. *New York*, 1858

† **Brigoli.** Lettera sopra la Macchina Elettrica ad un amico suo. Da Venezia li 25 Novembre, 1747. 4to. 8 pp. *Verona*, 1748

Brilhac. A Plate Electrical Machine. 2 plates. (Noben einander stehend.)

Brisbane, Sir Thos. Macdougal. *Born July* 23, 1773, *at Brisbane House, Ayrshire; died Jan.* 27, 1860, *at Brisbane House, Ayrshire.*

Vide Makerstown Observations.

Brisbane, Sir Thomas Macdougall B. *Born* 1770.

Britannica, Encyclopædia. *Vide* Anons. Elect. 1823.

† **British Association Council.** Report on the existing Relations between the Kew Committee and the British Association. 8vo. 35 pp. *London*, 1870

British Association for the Advancement of Science. Report of the 1st and 2nd Meetings of the Association, at York in 1831, and at Oxford in 1832, including its Proceedings, Recommendations, and Transactions. 8vo. *London*, 1833

Report of the 3rd Meeting at Cambridge in 1833. 8vo. *London*, 1834
„ 4th Meeting at Edinburgh in 1834. 8vo. *London*, 1835
„ 5th Meeting at Dublin in 1835. 8vo. *London*, 1836
„ 6th Meeting at Bristol in 1836. 8vo. *London*, 1837
„ 7th Meeting at Liverpool in 1837. 8vo. *London*, 1838
„ 8th Meeting at Newcastle in 1838. 8vo. *London*
„ 9th Meeting at Birmingham in 1839. 8vo. *London*
„ 10th Meeting at Glasgow in 1840. 8vo. *London*
„ 11th Meeting at Plymouth in 1841. 8vo. *London*
„ 12th Meeting at Manchester in 1842. 8vo. *London*
„ 13th Meeting at Cork in 1843. 8vo. *London*
„ 14th Meeting at York in 1844. 8vo. *London*
„ 15th Meeting at Cambridge in 1845. 8vo. *London*
„ 16th Meeting at Southampton in 1846. 8vo. *London*
„ 17th Meeting at Oxford in 1847. 8vo. *London*
„ 18th Meeting at Swansea in 1848. 8vo. *London*
„ 19th Meeting at Birmingham in 1849. 8vo. *London*
„ 20th Meeting at Edinburgh in 1850. 8vo. *London*
„ 21st Meeting at Ipswich in 1851. 8vo. *London*
„ 22nd Meeting at Belfast in 1852. 8vo. *London*
„ 23rd Meeting at Hull in 1853. 8vo. *London*
„ 24th Meeting at Liverpool in 1854. 8vo. *London*
„ 25th Meeting at Glasgow in 1855. 8vo. *London*
„ 26th Meeting at Cheltenham in 1856. 8vo. *London*
„ 27th Meeting at Dublin in 1857. 8vo. *London*

British Association—*continued.*

Report of the 28th Meeting at Leeds in 1858. 8vo. *London*, 1859
„ 29th Meeting at Aberdeen in 1859. 8vo. *London*, 1860
„ 30th Meeting at Oxford in 1860. 8vo. *London*, 1861
„ 31st Meeting at Manchester in 1861. 8vo. *London*, 1862

† Minutes of Council. 8vo. *London*, 1841-53

Proceedings connected with the Magnetical and Meteorological Conference held at Cambridge in June, 1845. 8vo. *London*, 1845

British Cyclopædia. Arts and Sciences. 2 vols. royal 8vo. *London*, 1838

Brivazac. *Vide* Beaumont-Brivazac.

† **Brix,** P. W. Die Stadt-Telegraphen-Leitung in Berlin, zwichen der Centralstation im Königlichen Postgebäude und den von den funf Berliner Bahnhöfen abgehenden Telegraphen-Linien. 4to. 16 pp. 11 plates. (*Besonderer Abdruck aus der Zeitschrift des Deutsch-Oesterreichischen Telegraphen-Vereins.*) *Berlin*, 1857

Zeitschrift des Deutsch-Oesterreichischen Telegraphen-Vereins. Redacteur, Von Dr. P. Wilde Brix. 16 Jahrg. 1869. 4to. 12 Hefte. *Berlin*, 1869

Annalen der Telegraphie. Herausgegeben, und redigert von Dr. P. W. Brix im Anschluss an die Zeitschrift des Deutsch-Oesterreichen Telegraphen-Vereins. 4to. *Berlin*, 1870

† **Brocklesby,** T. Elements of Meteorology for Schools, &c. 12mo. 2nd edition. 240 pp. cuts. Electricity, p. 131. *New York*, 1849

† **Brook,** A. Miscellaneous Experiments and Remarks on Electricity, the Air-pump, and the Barometer, with the description of an Electrometer of a new construction. *Norwich*, 1789

Vermischte Erfahrungen über die Electricität, Luftpumpe und Barometer, aus dem Englischen von Kuhn. 8vo. *Leipzig*, 1790

† **Brooke,** C. An Account of the remarkable Magnetic Disturbance which continued from the 22d to the 25th October, 1847. (*Phil. Mag. for January*, 1848.) (*Faraday's copy.*) *London*, 1848

* † On the Automatic Registration of Magnetometers by Photography. No. iii. Received June 21, read June 21, 1849. 4to. 9 pp. (*Phil. Trans.* part i., *for* 1850.) *London*, 1850

Brougham, Lord. Tracts, Mathematical and Physical. Small vo. 1860

Brougham, Brewster, and Others. Natural Philosophy. 4 vols. 8vo. (*Library of Useful Knowledge.*) *London*, 1835-40

† **Broun,** J. A. On the combined Motions of the Magnetic Needle, and on the Aurora Borealis. 8vo. 16 pp. 2 plates. (*Proceedings of the Royal Society of Edinburgh*, vol. ii. No. 39.) (*Faraday's copy.*) *Edinburgh*

† Results of the Makerstown Observations. No. 1. On the relation of the Variations of the horizontal Intensity of the Earth's Magnetism to the solar and lunar periods. 4to. 11 pp. 2 plates. (*Proceedings of the Royal Society of Edinburgh*, xvi. part ii.) *Edinburgh*, 1846

† General Results of the Observations in Magnetism, &c. at Makerstown, in the Observatory of Sir T. Brisbane. 4to. 86 pp. 9 plates. (*Transactions of the Royal Society of Edinburgh*, ix, part ii.) *Edinburgh*, 1850

† Report to Sir T. Brisbane on the completion of the publication of the Observations at Makerstown. 4to. 16 pp. *Edinburgh*, 1850

† On the Dust Figures observed on Plate Glass. (*Phil. Mag. for January*, 1851.) *London*, 1851

† On the combined Motions of the Magnetic Needle, and on the Aurora Borealis. 8vo. (*Proceedings of the Royal Society of Edinburgh*, ii. No. 39.) *Edinburgh*

† **Browne,** G. H. Of the Trembling of the Nerves of a Frog after Death. Experiments by M. Du Verney in 1700. 8vo. (*Phil. Mag.* xviii. 285.) *London*, 1804

(*Note.—He found this article in the Transactions of the Academy of Sciences at Paris for* 1700. *Reference is made to Gardiner in his Observations on the Animal Economy; to Luigi and Klagel; and to Gardini* (*this last on Lizardi*), *The above experiments by Verney are said to be the most remote instance of effects now called Galvanic.*)

† **Browne,** Peter A. An Essay on solid Meteors and Aërolites, or meteoric stones. 8vo. 38 pp. *Philadelphia*, 1844

† **Browning,** J. Part of a Letter from J. Browning to H. Baker, dated December 11, 1746, concerning the effect of Electricity on Vegetables. Read January 22, 1746-47. 4to. 3 pp. (*Phil. Trans.* xliv. 373.) *London*, 1746-47

Brown-Sequard, E. Die Lebensenergie herabsetzende Wirkung des electrischen Stromes. Versuche. (*Gaz. Méd. de Paris*, 1849, pp. 881-999) *Paris*, 1849

Sur les Résultats de la Section et de la Galvanisation du Nerf grand sympathique au Cou. 8vo. (*Ext. de la Gazette Médicale.*) *Paris*, 1854

† **Brück,** R. Electricité ou Magnétisme du Globe terrestre. 8vo. 298 pp. *Bruxelles*, 1851

† Electricité ou Magnétisme du Globe terrestre. Extrait des études sur les principes des Sciences physiques. Faits magnétiques proprement dits : variations de la déclinaison, de l'inclinaison, et des forces magnétiques dans le barreau aimanté librement suspendu, et causes de ces variations. Partie ii. 1 vol. 8vo. *Bruxelles*, 1855

† Electricité ou Magnétisme du Globe terrestre. Extrait d'études des Sciences physiques. Faits magnétiques proprement dits. Electricité atmosphèrique, Aurores, &c. Partie ii. vol. ii. 8vo. 542 pp. (This is the title in this copy, but in the preface, &c. it is called vol. iii.) *Bruxelles*, 1858

† L'Origine des Etoiles filantes. 8vo. 155 pp. 11 tables. *Bruxelles*, 1869

† Etude sur la Physique du Globe. Phénomènes atmosphériques. 8vo. 150 pp. 2 plates. *Bruxelles*, 1869

Brucke, E. Manifeste du Magnétisme du Globe et de l'humanité, ou résumé succinct du magnétisme terrestre et de son influence sur les destinées humaines. 8vo. (*Librairie Internationale.*) *Paris*, 1866

† Ueber den Einfluss der Strömesdauer auf die elektrische Erregung der Muskeln. (Vorgelegt 31 Oct. 1867.) 8vo. 9 pp. (*Sitzb. der Königl. Akad. der Wissenschaften*, lvi. Oct. Heft. 1867.) *Wien*, 1867

† Ueber das Verhalten entnervter Muskeln gegen discontinuirliche elektrische Ströme. 8vo. 4 pp. (*Sitzb. der Königl. Akad. der Wissenschaften*, lviii. 2 Abth. Juni Heft, 1868.) *Wien*, 1868

† Ueber die Reizung der Bewegungsnerven durch elektrische Ströme. 8vo. 16 pp. (*Sitzb. der Königl. Akad. der Wissenschaften*, 2 Abth. Oct. Heft, 1868.) *Wien*, 1868

Bruennow, F. De attractione molecular. 4to. *Berolini*, 1843

Brugmans, Anton. *Born October* 22, 1732, *at Hantum, Friesland; died April* 27 1789, *at Gröningen.* (*Poggendorff*, i. 316.)

Tentamina Philosophica de materia magnetica ejusque actione in ferrum et magnetem. 4to. *Franoquerœ*, 1765

Nieuwe manier om de magnetische Kragt der lichaamen te onderzoeken. (*Vaderlandsche Letteroefeningen*, 1775 *et* 1776.) 1775-76

† Magnetismus, seu de affinitatibus magneticis. Observationes academicæ. 4to. 133 pp. 1 plate.

Note.—Van Swinden, Recueil i. 34, *quotes the title Magnetismus sive de Attractione magnetica Observationes.* 4to. *Groningæ*, 1777. *Lugd., Bat.* 1778

Brugmans—*continued.*

Beobachtungen über die Verwandschaften des Magnets, aus dem Lateinischen übersetzt und mit einigen Anmerkungen vermehrt, von Eschenbach. 8vo. 167 pp. *Leipzig*, 1781

† Philosophische Versuche über die magnetische Materie und deren Wirkung in Eisen und Magnet, aus dem Lateinischen des Brugmans, übersetzt und mit Anmerkungen und Zusätzen des Verfassers vermehrt. Herausgegeben von C. G. Eschenbach. 8vo. 309 pp. 6 plates. (*Volta's copy.*) *Leipzig*, 1784

Brugnatelli, Gaspare (Necrologia di.) *Born April* 25, 1795, *at Pavia; died October* 31, 1852, *at Milan. Son of the celebrated Luigi Valentino Brugnatelli. Joined his father in editing the Giornale di Fisica, and joined Configliachi in the editorship after his death. Was at one time one of the directors of the Biblioteca Italiana—viz. from* 1831 *to* 1840 *inclusive*, vols. lxi. *to* xcix. (*Giornale I. R. Ist. Lomb.* new series, ix. 489. In 4to. 1856.)

† Dell' arte Galvano-plastica. 8vo. 11 pp. (*Biblio. Ital.* xcviii. 187.) *Milano*, 1840

† Metodo originale Italiano di Elettro-doratura esposta da G. Grimelli. Manuale dell' arte d'indorare e d'inargentare coi metodi elettro-chimici . . . di F. Selmi. 8vo. 8 pp. (*Giornale I. R. Ist. Lomb.* x. 266.) *Milano*, 1845

† Sui trasporti Elettrici, e le elettriche teorie di. 8vo. 2 pp. (*Giornale I. R. Ist. Lomb.* xii. 6.) *Milano*, 1845

Brugnatelli (G.), **Brunacci, e Configliachi.** Giornale di Fisica, Chimica, Storia-naturale, Medicina, ed Arti. Compilato da Gaspare Brugnatelli. Decade seconda. *Pavia*, 1818-27

Brugnatelli, Luigi Valentino. *Born February* 14, 1761, *at Pavia; died October* 24, 1818, *at Pavia*

† Biblioteca fisica d'Europa, ossia Raccolta di Osservazioni sopra la fisica, matematica, chimica, storia naturale, medicina, ed arti. 22 vols. 8vo. (*The Electrical articles, &c. are in the Library.*) *Pavia*, 1788-91

† Annali di Chimica, ovvero, Raccolta di Memorie sulle Scienze, Arti, e Manifatture ad essa relative. 22 vols. 8vo. (*The Electrical articles are in the Library.*) *Pavia*, 1790-1805

† Giornale Fisico-medico, ossia Raccolta di Osservazioni sopra la fisica, matematica, chimica, storia naturale, medicina, chirurgia, arti, e agricoltura. Per servire di seguito alla Biblioteca fisica d'Europa. 20 vols. 8vo. (*The Electrical articles are in the Library.*) *Pavia*, 1792-96

Extrait d'une Lettre (de B.) sur la non-existence de la pile à charger. 8vo. (*Journal de Chim. de Van Mons*, xvi. 132.) *Bruxelles*

Expériences et Observations de Brugnatelli relatives à l'action de la pile sur diverses humeurs animales. 8vo. (*Journal de Chim. de Van Mons.* x. 114.) *Bruxelles*

† Memorie sull' elettricità animale inserite nel Giornale Fisico-medico del Sig. Brugnatelli. 8vo. 147 pp. (*All the Electrical Articles of this work are in the Library.*) *Pavia*, 1792

† Articolo di lettera al Valli sull' elettricità animale. 8vo. 2 pp. (*Annali di Chimica di Brugnatelli*, vii. 239.) *Pavia*, 1795

Osservazioni chimiche sopra l'ossi-elettrico. 8vo. 17 pp. 1 plate. (*Annali di Chimica di Brugnatelli*, xviii. 136.) *Pavia*, 1800

(*Note.—This contains his account of Bellissima cristallizzazione ottenuta sopra diversi metalli coll' ossi elettrico. He announces, in fact, the reduction, the transport, the precipitation, &c. of the metals dissolved on the negative pole of Volta's Electrometer. Cossa* (*p.* 10, *note*) *says that this Memoir was translated and printed in Van Mons' Journal*, vol. i. p. 1.)

On Electro-gilding. 8vo. (*Vide* his Elementi di Chimica, 4th edition, 1810.) (*Ann. de Chim.* xviii. 136; *and also in Van Mons' Journal de Chim.* i. 1.) *Paris*, 1806

Brugnatelli, Luigi—*continued.*

Extrait d'une Lettre de Brugnatelli sur des expériences qu'on prétend être contraires à l'identité des fluides électriques et galvaniques, datée de Paris du 3 Brumaire, an 10. (*Journal de Chim. de Van Mons*, ii. 216.) *Bruxelles*, 1802

(*Note.—This is probably the proper title. It contains some experiments of Gautherot, made at the third meeting of the Commission of the Institute on Volta's "Identité" . . . held at "le cabinet de M. Charles."*)

Extrait d'une Lettre sur les Expériences prétendument contraires à l'identité des Fluides Electrique et Galvanique. 8vo. (*Journal de Chim. de Van Mons*, i. 216.) *Bruxelles*

Extrait d'une Lettre. 1. Expériences Electro-galvaniques proposées par le premier Consul Bonaparte. 2. Construction d'une grande pile à Chaudrons. 8vo. (*Journal de Chim. de Van Mons*, i. 325.) *Bruxelles*

Extrait d'une Lettre contenant : 1. Vapeur vésiculaire. 2. Décomposition de l'Alcohol et de l'Oxiseptonique par la pile de Volta. 3. Analyse du Mercure fulminant. 8vo. (*Journal de Chim. de Van Mons* ii. 106.) *Bruxelles*

Extrait d'une Lettre contenant : 1. Propriété fulminante de l'acide nitrique. 2. Action de la pile sur diverses humeurs animales. 3. Conversion des rondelles de drap impregnées d'eau salée en savon de laine par l'action de la pile. 8vo. (*Journal de Van Mons*, iv. 143.) *Bruxelles*

Extrait d'une Lettre : 1. Sur une correction faite à la pile portative de Volta. 2. Sur une réforme de la nomenclature chimique. 8vo. (*Journal de Chim. de Van Mons*, i. 24.) *Bruxelles*, 1802

Extrait d'une Lettre contenant : 1. Nouvelles expériences galvaniques. 2. Découverte d'un sulfure d'antimoine oxidé rouge, sublimé. 8vo. (*Journal de Chim. de Van Mons*, i. 101.) *Bruxelles*, 1802

† Lettera al Sig. L. Targioni contenente un' Esposizione succinta delle principali scoperte o interessanti Osservazioni fatte nel corrente anno 1802, o poco prima. 8vo. 30 pp. (*Annali di Chim. di Brugnatelli*, xxi. 3.) *Pavia*, 1802

† Descrizione del Piliere del Volta, comunicata dal Brugnatelli al Van Mons. 8vo. 12 pp. 1 plate. (*Annali di Chim. di Brugnatelli*, xix. 77.) *Pavia*, 1802

† Notizie Letterarie : 4. Sul galvanismo. 5. Uso medico del piliere di Volta. 7. Piliere composto di un solo metallo, proposto da Davy. 9. Magnetismo del cobalto e del nikel, di Sage. 8vo. 8 pp. (*Annali di Chim. di Brugnatelli*, xix. 274, 277, 280, 281.) *Pavia*, 1802

† Fenomeni osservati colla Pila Voltiana. 8vo. 6 pp. (*Annali di Chim. di Brugnatelli*, xxi. 143.) *Pavia*, 1802

(*Note.—In this article, at p.* 148, *he says: "La maniera più spedita di vedere ripristinati alcuni termossidi metallici in soluzione, coll' azione della pila, si è per mezzo degli ammoniuro-metallici." This memoir was reproduced in Van Mons's Journal de Chim.* lxxvi.)

† Elementi di Chimica, &c. ii. *Pavia*, 1803

(The 4th edition, 1810, tom. i. p. 185. Electro-gilding, &c.)

Elementi di Chimica, &c. 2nd edition. 3 vols. 8vo. *Pavia*, 1804

Elementi di Chimica appoggiati alle più recenti Scoperte, Chimiche, e Farmaceutiche. 4 vols. 4to. (Figures.) *Pavia*, 1804

† Notizie delle principali Osservazioni e Scoperte fatte nella Chimica nell' anno 1804. 8vo. 35 pp. (*Annali di Chim. di Brugnatelli*, xxii. 1.) *Pavia*, 1805

(*Note.—He says, at p.* 26 . . . "*abbiamo fatto vedere come l'ammoniuro d'oro possa servire a dorare l'argento per mezzo della pila di Volta.*" *At p.* 16, *Brugnatelli and Volta's Experiment upon Ritter's secondary pile.*)

† On Electro-gilding, headed Galvanism. 8vo. 1 p. *London*, 1805

(*Note.—In a letter to Van Mons, dated in* 1803, *he says: "I have lately gilt, in a complete manner, two large silver medals, by bringing them into communication, by means of a steel wire, with the negative pole of a Voltaic pile, and keeping them, one after the other, immersed in ammoniuret of gold, newly made and well saturated.*) (*Phil. Mag.* xxi. 187.)

Brugnatelli, Luigi—*continued.*

† Nuove Scoperte Galvaniche del Ritter, comunicate dal Bernouilli al Van Mons. Esperienze Galvaniche del Medesimo. Osservazioni Chimico-galvaniche dell' Œrsted. 8vo. 17 pp. (*Annali di Chim. di Brugnatelli*, xxii. 77 to 92. Translated, with Notes by B . . ., from *Journal de Chim. de Van Mons*, No. 17.) *Pavia*, 1805

† Nota (di B.) sopra una Pila di sostanze vegetabili. 8vo. 4 pp. (*Annali di Chim. di Brugnatelli*, xxii. 301.) *Pavia*, 1805

† Osservazioni Chimico-galvaniche comunicate all' Istituto Nazionale d'Italia. 8vo. 44 pp. 1 plate. (*Annali di Chim. di Brugnatelli*, xxii. 257.) *Pavia*, 1805

(*Note.—This contains the experiments detailed in his* "Fenomeni Osservati colla Pila," *repeated on a larger scale.*)

† Chemico-Galvanic Observations communicated to the National Institute of Italy. 8vo. 10 pp. (*Phil. Mag.* xxv. 57.) *London*, 1806

Osservazioni sopra l'Identità di alcuni nuovi caratteri del Carbone con quelli dei metalli. 4to. (*Mem. dell' Istit. Naz. Italiano*, tom. i. part ii.p. 291.) *Bologna*, 1806

Maniera di indorare le Medaglie ed i fini pezzi d'Argento col Galvanismo. (*Effemeridi Chim. Mediche di Milano*, 1807. Semestre i. 57.) *Milano*, 1807

Discorso preliminare sulle Osservazioni e sulle Scoperte più importanti fatte nel 1807. 4to. (*Giorn. di Fis. Chim. &c.* i. 4-32.) *Pavia*, 1808

Nota sopra un' Objezione fatta alla Teoria Termossigena, e sopra alcune Vegetazioni Metalliche ottenute col Galvanismo. 4to. (*Giorn. di Fis. Chim., &c.* i. 28.) *Pavia*, 1808

Singolare Degenerazione del cartone col Galvanismo. 4to. (*Giorn. di Fis. Chim. &c.* i. 146.) *Pavia*, 1808

Sui Conduttori Elettrici applicati alla Pila Voltiana, detti Galvanici. Memoria del Prof. Brugnatelli e Configliachi. 4to. (*Giorn. di Fis. Chim.* i. 147 e 338.) *Pavia*, 1808

Nota sulla Decomposizione degli Alcali ottenuta dal Davy. 4to. (*Giorn. di Fis. Chim. &c.* i. 164.) *Pavia*, 1808

Trattato elementare di Chimica generale, &c. 8vo. tom. iv. *Pavia*, 1810

Di alcune leghe Metalliche ottenute col Galvanismo. 4to. (*Giorn. di Chim. Fis. e Storia Nat.* ix. 145.) *Pavia*, 1816

Note.—Cossa says: "*Questa memoria venne riprodotta per estratto nei seguenti giornali.*"

Thomson's Annals of Philosophy, xii. 228. 1817.
Journal de Pharmacie, iii. 425. Paris, Set. 1817.
Giornale di Chimica, Fisica, e Storia Naturale, xi. 130. Pavia, 1818.

Osservazione di L. Brugnatelli sopra le leghe metalliche che si possono avere col Galvanismo per via umida, per servire di risposta all' Articolo del Sig. G. L., inserito negli *Annales de Chimie*, Fév. 1818. 4to. (*Giornale di Chimica, Fisica, e Storia Naturale*, xi. 130. 2nd decade.) *Pavia*, 1818

Memoirs of the Life of Lewis Brugnatelli. 8vo. 6 pp. (*Phil. Mag.* liii. 321.) *London*, 1819

Elogio del di Bizio. Letto nell' Ateneo di Venezia, 19 Luglio, 1827. *Venezia*, 1832

† Cenni sulla Vita e sugli Scritti di Luigi Valentino Brugnatelli, Prof. di Chimica nell' Università di Pavia, dal 1797 al 1818. Di A. Cossa. 8vo. 32 pp. *Pavia*, 1857

† Portrait of Brugnatelli, by Longhi.

Brugnatelli, L., e Brera, V. L. Commentarii Medici. (Opera Periodica.) 8vo. 1796 to 1799

Note.—Follows the Giornale Fisico-Medico. "*Continuato dopo la parte 2 del tom. i. dal solo Brera.* (*Vide Vita di B. di Cossa, p.* 32.)

Brugnatelli, L., Brugnatelli, G. Brunacci, and **Configliachi.** Giornale di Fisica, Chimica, e Storia Naturale. (Decade prima.) 10 vols. 4to. *Pavia*, 1808-17

(*Note.—Vols.* i. *to* vii. *are by L. Brugnatelli, Vol.* viii. *by L. and G. Brugnatelli, Vols.* ix. *and* x. *by G. Brugnatelli, Brunacci, and Configliachi. This work follows L. Brugnatelli's "Annali di Chimica," &c. For the continuation of this journal, vide Brugnatelli, G., Brunacci, and Configliachi.* (*Seconda decade, &c.*)

Bruhns, C. Geschichte und Beschreibung der Leipziger Sternwarte, &c. *Leipzig*, 1861

† Bestimmung der Längendifferenz zwischen Berlin und Wien auf Telegraphischem Wege ausgeführt. Von den Herren Forster und Weiss. Herausgegeben von Dr. C. Bruhns. 4to. 47 pp. (*Publ. der Konig Preuss. geodatis. Instituts.*) *Leipzig*, 1871

Bestimmung der Längendifferenz zwischen Leipzig und Wien. iii. *Leipzig*, 1872

† **Bruhns e Förster.** Bestimmung der Längendifferenz zwischen den Sternwarten zu Berlin und Leipzig, auf Telegraphischem Wege ausgeführt im April, 1864. 4to. 73 pp. *Leipzig*, 1865

Brunacci. *Vide* Brugnatelli and others.

Brunel, Sir Marc Isambert. *Born April* 25, 1769, *at Hacqueville, Normandy; died December* 12, 1849, *at London.*

† **Brunel and Daniel.** Statement of Facts respecting Cooke and Wheatstone's relative Positions in connection with the Invention of the Electric Telegraph. Dated 27th April. 1 page, folded. *London*, 1841

Brunet, J. C. Manuel du Libraire. 3 vols. 8vo. *Paris*, 1810

Manuel du Libraire. 4 vols. 8vo. *Paris*, 1820

Nouvelles Recherches. Supplément. 3 vols. 8vo. *Paris*, 1834

Manuel du Libraire. 5 vols. 8vo. 4th edition. *Paris*, 1844

Manuel du Libraire et de l'Amateur des Livres. 6 vols. 12 parts, royal 8vo. 5th edition. *Paris*, 1860-4

Brunet, G. Annuaire des Sociétés savantes. Notice de. 8vo. 1846

† **Bruni,** J. L. Extract of a Letter from J. L. Bruni to H. Baker, concerning the Bologna Bottle. Read Jan. 31, 1744-5. 4to. 2 pp. (*Phil. Trans.* xliii. 272.) *London*, 1744-5

Brunner, Carl, jun. ? *Born June* 23, 1823, *at Berne.*

De ratione, quæ inter Fluidorum cohæsionem et Calorem aliasque vires Molecules intercedit. 4to. Tabula adjecta. *Berolini*, 1846

Elektrische Lichterscheinungen ohne Donner. (*Fror. Not.* ix. x. 152.) 1848

† **Brunner,** C. (Sohn). Untersuchungen über die Cohäsion der Flüssigkeiten. 4to. 44 pp. 2 plates. 1849

(*Note.—He refers to Draper's* (*of New York*) *Theory of Electricity.*)

† **Brunnstrom,** J. A. Nägra thorier for Elektricitet. 8vo. 46 pp. *Lund*, 1864

† **Bruno,** De. Recherches sur la Direction du Fluide Magnétique. 8vo. 8 plates. 206 pp. *Paris*, 1785

† **Bruns,** V. von. Die Galvano-Chirurgie oder die Galvanokaustik und Elektrolysis bei chirurgischen Krankheiten. 8vo. 145 pp. *Tubingen*, 1870

Brussels Academy. Mémoire de l'Académie des Sciences et Belles Lettres de Bruxelles. 4to. *Bruxelles*, 1777-88

Nouveaux Mémoires. Idem. 4to. *Bruxelles*, 1820

Mémoire sur les Questions proposées. 4to. 1773 ?

Bulletin de l'Académie des Sciences et Belles Lettres de Bruxelles. 8vo. *Bruxelles*

Brussels Academy—*continued.*

Observations Magnétiques et Météorologiques faites à des Epoques déterminées. 4to. 5 parts ? (*Extrait de l'Acad. Roy. de Bruxelles*, xv. to xix. ?) *Bruxelles*, 1844

† **Bryant**, W. Account of an electrical Eel; or, the Torpedo of Surinam. 4to. 4 pp. (*Trans. American Phil. Soc.* ii. 166. Old series.) *Philadelphia*, 1786

Brydone, Patrick. *Born* 1741, *at Dumbarton, N.B.; died June* 19, 1818, *at Lennel House, Berwickshire.*

An Instance of the Electric Virtue in the Cure of a Palsy. 4to. (*Phil. Trans.* part i. p. 392, 1757, and p. 695.) *London*, 1757

Letter containing an Account of a Fiery Meteor seen on the 10th February, 1772, and also of some new Electrical Experiments. 4to. (*Phil. Trans.* 1773, p. 163.) *London*, 1773

† Osservazioni sull' Elettricità. Lettera ix. 12mo. 16 pp. (*Scelta d' Opuscoli*, x. 71.) *Milano*, 1775

Brydone. Voyage de Sicile et de Malte. (*Lightning of Volcanoes.*)

† **Buccio.** L'uso medico che si può fare dell' elettricità e del galvanismo. 8vo. 5 pp. (*Comment. Acad. Dipartimento del Mella per* 1811, p. 60.) *Brescia*, 1812

† **Buch**, Leopold de. Extract of a Letter from M. Leopold de Buch, of Milan, to Professor Pictet, of Geneva, on the production of Muriatic Acid and Soda by the Galvanic Decomposition of Water. 8vo. 2 pp. (*Phil. Mag.* xxiv. 244.) *London*, 1806

Buchan, A. Introductory Text-book of Meteorology. 8vo. 1871

Buchenau, F. Mittheilungen über einen interessanten Blitzschlag in mehreren Stielchen. 4to. 15 pp. *Dresden*, 1867

† **Buchenroder**, W. L. von. An Account of the Earthquakes which occurred at the Cape of Good Hope during the month of December, 1809. Abridged by him. 8vo. 5 pp. (*Phil. Mag. or Annals*, ix. 71.) *London*, 1831

(*Note.*—At p. 73 Reports of Meteors (explosive, &c.) seen at the time of Earthquake shocks, &c.)

Bucher. Einige gegen die Gewitterableiter gemachte Einwürfe beantwortet. 8vo. *Frankfort*, 1790

Buchner, O. Die Feuermeteore, insbesondere die Meteoriten historisch und naturwissenschaftlich betrachtet. 8vo. 192 pp. *Geissen*, 1859

Die Meteoriten in Sammlungen, ihre Geschichte, mineralogische und chemische Beschaffenheit. 8vo. 202 pp. *Leipzig*, 1863

Zweites Quellenverzeichniss zur Literatur der Meteoriten. Ein Anhang zu Kesselmeyer, über den Ursprung der Meteorsteine. 4to. 19 pp. (*Abgedruckt aus den Abhandl. der Senckenbergischen naturforschenden Gesellschaft.*) *Frankfurt*, 1863

† Die Construction und Anlegung der Blitzableiter, zum Schutze aller Arten von Gebäuden, Seeschiffen, und Telegrafen-stationen; nebst Kosten Voranschlägen . . . . 8vo. 152 pp. mit einen Atlas von 6 Foliotafeln. *Weimar*, 1867

Bucholz, C. F. Ueber die chemischen Wirksamkeit galvanischer Ketten, aus Metall-Lösungen, Wasser oder Säure, und Metallen. 8vo. (*Gehlen's Journ. für Chem. und Phys.* v. 1808.) 1808

Budge. On Irritation of the Medulla oblongata, and its Influence on the Brain, &c. (*Archiv von Roser und Wunderlich*, 1846.) 1846

On "ein Centralorgan für den Lendentheil des Sympathicus," and Electrisation thereof, &c. (*Virchow's Archiv*, 1859, p. 115.) 1859

† **Budge**, J. Ueber den Galvanischen Strom, welcher sich in der Haut des Frosches zu erkennen giebt. 8vo. 16 pp. (*Poggendorff's Annalen*, bd. cxi.) *Greifswald*, 1860

Buerbaum, J. Die Elektro-magnetische Telegraphie, mit besonderer Berücksichtigung der ausgeführten Telegraphen-Systeme. 8vo. *Berlin*, 1851

Buff, Heinrich. *Born May* 23, 1805, *at Radelheim, Wetterau.*

Many Articles on Electricity, &c. in *Poggendorff, Ann.* 1829 to 1855.

† Zusammenhang der neuern Elektricitätslehre mit der Contact-theorie. 8vo. *Giessen,* 1842

† Ueber den Einfluss der Zwischenplatten in der Electrischen Säule. 8vo. 8 pp. (*Annal. de Pharm.* xxxii. 1 heft.) *Heidelberg,* 1840

† Ueber Volta-Electrische Quantität und Intensität. 8vo. 6 pp. (*Annalen der Pharm.* xxxii. 1 heft.) *Heidelberg,* 1840

† Ueber die trockene Electrische Säule. 8vo. 23 pp. (*Annal. der Chem. und Pharm.* xxxiv. 1 heft.) *Heidelberg,* 1840

† Ueber das Elektrolytische Gesetz. 8vo. 15 pp. (*Annal. der Chem. und Pharm.* lxxxv. 1 heft.) *Heidelberg,* 1842

† Zur Berührungselectricität. 8vo. 4 pp. (*Annal. der Chem. und Pharm.* lxxxiii. 2 heft.) *Heidelberg*

† Ueber die Electrische Beschaffenheit der Flamme. 8vo. 16 pp. (*Annal. der Chem. und Pharm.* lxxx. 1 heft.) (*Faraday's copy.*) *Leipzig*

Letters on the Physics of the Earth, by Dr. Hoffman. 12mo. *London,* 1851

Buffon, George Louis Leclerc. *Born Sept.* 7, 1707, *at Montbard, Bourgogne; died April* 16, 1788, *at Paris.* (*Poggendorff,* i. 338.)

Les Epoques de la Nature. 2 vols. (On Earthquakes, 4th Epoch.) *Paris,* 1780

† Traité de l'Aimant et de ses Usages. 4to. 208 pp. and tables. (This is the 5th volume of his *Hist. Nat. des Mineraux,* in 5 vols. 4to.) *Paris,* 1788

Bugge, Thomas. *Born Oct.* 12, 1740, *at Copenhagen; died Jan.* 15, 1815, *at Copenhagen.*

Articles in *Dansk. Vid. Selsk.* (*Poggendorff,* i. 339.)

Buissart. Mémoire sur les divers Avantages qu'on pourroit retirer de la Multiplicité des Conducteurs Electriques, ou Paratonnerres. Lu à l'Acad. d'Arras, 24 Avril, 1781. (*Saumlez, Phys. Supplem.* 1782. xxi. pp. 140-48.) 1782

Mémoire juridique sur les Conducteurs Electriques. (From *Van Swinden,* p. 137; *Van Troostwyk* and *Krayenhoff,* p. 241.)

Bulengerus. De Terræ motu et Fulminibus. (*Græcius, Thes. Antiq. Rom.* v. 519-42. lib. v.)

Bulletin International. Marié Davy et autres Auteurs. (Contains Observations of Storms, Tornadoes, &c.)

Bulletin des Sciences Mathématique, Astronomique, Physique, et Chimiques. 16 vols. 8vo. *Paris,* 1824-31

Bulletin des Sciences Technologiques. 18 vols. 8vo. *Paris,* 1824-31

Bullettino Meteorologico dell' Osservatorio del Collegio Romano. *Vide* Secchi.

† **Bulmerincq,** M. C. von. Beiträge zur ärztlichen Behandlung, mittelst des Mineralischen Magnetismus. Mit einer Vorrede von Heinrich Steffens. 8vo. 74 pp. *Berlin,* 1835

Bunsen, Jeremias. *Born Dec.* 8, 1688, *at Arolsen; died March* 11, 1752, at *Arolsen.*

Versuch wie die Meteore des Donners und Blitzes, item das Aufsteigen der Dünste, ingleichen des Nordscheins, aus elektrischen Wirkungen herzuleiten und zu erklären sind; u.s.w. *Lemgo,* 1750

Erklärung der elektrischen und magnetischen Kräfte. 8vo. (From *Krunitz,* p. 28; *Nollet, Essai,* 4th edition, p. 222. *Poggendorff,* i. 340, says, "Frankfurt und Leipzig.) *Lemgo,* 1752

Bunsen, Robert Wilhelm. *Born March* 31, 1811, *at Göttingen.*

Anwendung der Kohle zu Voltaischen Battarien. (*Poggendorff, Ann.* liv. "in or before 1842.") *Leipzig*

Bunsen, R. W.—*continued.*

Bereitung einer Kohle als Ersatz des Platins in der Grove'schen Kette. 8vo. (*Pogg. Ann.* lv. 1842.) *Leipzig*, 1842
(*This is Volta's discovery*, not *Bunsen's*. F. R.)

Ueber die Kohlenzinkkette. Inaugural Dissertation. *Marburg*, 1843

Verbesserte Kohlen-batterie. 8vo. (*Pogg. Ann.* lx. 1843.) *Leipzig*, 1843

Buntzen, Thomas. *Born Sept.* 5, 1776, *at Copenhagen; died* 1807, *at St. Petersburg.*

† Beitrage zu einer künftigen Physiologie. *Kopenhagen and Leipzig*, 1803

Burci. Passage of an Electrical Current . . . Medical. (*Vide* Matteucci.)

Dei Casi di Aneurisma nei quali può essere raccomandata l' ago-Elettro-puntura, e dei Modi per regolarla . . . 8vo. 58 pp. *Pisa*, 1852

Burdach, K. F. Bericht von der anatomischen Anstalt zu Königsberg. 8vo. *Königsberg*, 1822

Bureau des Longitudes. Annuaire publié par le Bureau des Longitudes. 23 vols. 18mo. *Paris*, 1822-52

Burgravius. Cura morborum . . . Magnet. 8vo. *Frankfort*, 1630

Burkhardt, Basle. Uber die Anwendung des Galvanismus bey Hysterie und Convulsionen. Beobachtungen. 8vo. (*Allgemeine Medizinische Annalen, Junius*, 1802.) 1802

Burman, Erich J. De Mineræ Ferræ per Magnetem investigatione. *Upsaliæ*, 1728

† **Burnaby,** A. Voyages dans l'Amérique Septentrionale. Traduit de l'Anglais. (Conductors melted by Lightning.) *Lausanne*, 1778

Burnet. On the Motion of Sap in Plants. Researches of Dutrochet on Endosmose and Exosmose, who refers this influence to Electricity. At Royal Institution, † Evening Meeting, March 27, 1829. 8vo. 2 pp. (*Phil. Mag. or Annals*, v. 389.) *London*, 1829

Burney, W. Answers by Dr. Wm. Burney to the Queries proposed by John Farey, † Esq., sen. (*Phil. Mag. for June*), respecting Shooting Stars and Meteors. 8vo. 3 pp. (*Phil. Mag.* lviii. 22.) *London*, 1821

† Description of a Meteoric Phenomenon which appeared at Gosport, July 4, 1821. 8vo. (*Phil. Mag.* lviii. 78.) *London*, 1821

† On the Appearance of Meteors, Parhelia, and Paraselenæ, as Prognostics in general of Wind and Rain. 8vo. 7 pp. (*Phil. Mag.* lviii. 127 and 198.) *London*, 1821

† A large Meteor on the 11th December, 1821, observed at Gosport, 8vo. 1 p. (*Phil. Mag.* lviii. 466.) *London*, 1821

Burnouf. (*Vide* Guillemin and Burnouf.)

Burq, V. Métallo-thérapie. Traitement des Maladies nerveuses, &c., par les Applications Métalliques. Abrégé Historique, &c. 8vo. 48 pp. (Extrait de 22 † *Mémoires ou Notes aux deux Académies.*) *Paris*, 1853

Burrell, E. An Account of Two Northern Auroras, as they were observed at the Vicarage of Sutton-at-Hone, in Kent. 4to. 1 p. (*Phil. Trans. for* 1717, p. 584.) *London*, 1717

Bursen. On Electricity. 38 pp. *Leipzig*, 1752

† **Busse,** Friedrich Gottlieb von. *Born April* 3, 1756, *at Gardelegen, Altmark; died Feb.* 4, 1835, *at Freiberg.*

Beruhigung über die neuen Wetterableiter. 8vo. 62 pp. *Leipzig*, 1791

Beschreibung einer wohlfeilen und sichern Blitzableitung, mit neuen Gründen und Erfahrungen. 8vo. 1 plate. *Leipzig*, 1811

Bussolin, P. Memoria Chimico-docimastica esponente un Processo per separare il rame dallo Zinco, applicabile pure alla Miniera di rame (d'Agordo), e suoi edotti, &c., di P. Bussolin. Capo . . . presso l'Imp. Reg. Zecca di Venezia. 8vo. (*Giornale da Rio*, lxvi. 156.) *Padova* 1828

Butet. Notice des principaux Résultats obtenus sur l'Electricité Galvanique, par les Expériences faites à l'Ecole de Médecine. (*Bulletin des Sciences de la Soc. Philomath.* No. 43, Vendémiaire, an 9.) *Paris*, 1801

Butschany, Matthias. *Born Feb.* 10, 1731, *at Altsohl, Ungarn; died August* 2, 1796, *at Hamburg.* (From *Poggendorff*, i. 353.)

Dissertatio de Fulgure et Tonitru ex Phænomenis Electricis. 4to. pp. 1 et 2. (*Poggendorff*, i. 353.) *Göttingen*, 1757

Der Blitz entsteht nicht durch Entzündung einiger brennbaren Theilchen die in der Luft schweben, und ist auch kein Feuer. (*Beitrage zu Hannov. Magazin*, 1761.) *Hanover*, 1761

Eine Unvollkommenheit der Blitzableiter, nebst ihrer Verbesserung. 8vo. (From *Poggendorff*, i. 353.) *Hamburg*, 1787

Butterfield. On Magnetical Sand. 4to. (*Phil. Trans. for* 1698, p. 336.) *London*, 1698

Buvina, Michel. On the Influence exerted by the Magnet on Carpes, even at a distance. (*Buffon, Hist. Nat.* Edition of Sonnini, tom. xiii. *de l'Histoire des Poissons*, p. 103.)

† **Buys-Ballot.** Meteorologische Preisfrage ausgeschreiben von der Societät der Künste und Wissenschaften zu Utrecht, und Motivirung derselben. 8vo. 28 pp. (*Berl. Fortsch. der Phys.* iii. 565.) *Berlin*, 1847

(*At p.* 586, *Registering Apparatus for Atmospheric Electricity, &c., of Sir Francis Ronalds.*)

† **Buzengeiger.** Electrische Pendel Uhr. 8vo. (*Stutgard Morgen-Blätter*, Sept. 23, 1815.) 1815

† **Buzorini,** L. Luftelectricität, Erdmagnetismus und Krankheitsconstitution. 8vo. 227 pp. *Belle-Vue bei Constanz*, 1841

Buzzetti, C. Sullo stato Meteorico della Lombardia. 8vo. 2nd edition. 36 pp. (*Refers to Kreil and Vedova's Magnetic Observations, &c.*) *Milano*, 1846

† **Buzzi,** F. Osservazione di un Amaurosi (gotta-serena) pituitosa curata coll' Elettricità. 4to. 2 pp. (*Opuscoli Scelti*, vi. 359.) *Milano*, 1783

† **Bywater,** T. An Essay on the History, Practice, and Theory of Electricity. 8vo. 127 pp. *London*, 1810

Essay on Electricity. (From *Bentley*, 1814 to 1839.)

C.

C., L. O. (*Vide* Anon. Electricity.) 1813

C * * *, J. (*Vide* Anon. Magnetism.) 1695

Cabanis, P. J. G. Rapports du physique et du moral de l'homme. 8vo. 2 vols. (*From Sue, Hist.* iv. 209.) *Paris*, 1805

Cabeus, Nicolas. *Born* 1585, *at Ferrara; died June* 30, 1650, *at Genua.* (*Poggendorff*, i. 355.)

Philosophia Magnetica, in qua magnetis natura penitus explicatur et omnium quæ hoc lapide cernuntor causæ propriæ afferuntor, &c., nova etiam Pyxis constructur, cum suo meridiano quæ propriam Poli elevationem cum suo meridiano ubique demonstrat; multa quoque dicuntur de electricis et aliis attractionibus, et eorum causis. Additis figuris variis tam cæcis quam ligno incisis. Auctore Nicolo Cabeo, Ferrariensi, Societ. Jesu. *Prostant Coloniæ*, 1629

Meteorologicorum Aristotelis Commentaria et Quæstiones . . quibus universa fere phil. exper. exponitur. . . 4 vols. fol. (*Magnetic Mountains*, tom. i. p. 66. *Magn. and Tides*, ii. 68. *Thunder* (*Ancient Opinions on*), ii. 280, 284. *On Thunder elsewhere. On Electricity*, iv. 266 and 412. *Coloured Clouds*, iii. 216.) *Roma*, 1646

Cabot (Caboto, Gaboto), Sebn. Machte in 1497 . . eine Entdeckungs Reise in die westlichen Meere. . In 1498 bischiffte er auf einer zweiten Reise die Küsten der Vereinigten Staaten bis zur Spitze von Florida. Beobachtete auf diesen Reisen die Verschiedenheit der magnetischen Declination. 8vo. (*From Poggendorff*, i. 355.) *No indication as to publication.* Quaritch, Cat., June 25, 1871, p. 6, has: "*Cabot* (*S.*), *Memoir of, with a Review of the History of Maritime Discovery.*" 1831

Cabry. (*Vide* Quetelet and others.)

Cadet, Jean Marc. *Born September* 4, 1751, *at Metz; died September*, 1835, *at Strasburg.*

On Lava attracted by the Magnet. (*Nova acta phys. med. . .* tom. iii.)

Cadet-de-Gassicourt, C. L. Dictionnaire de Chimie, &c. 8vo. 4 vols. (*From Sue*, iv. 204.) *Paris*, 1803

Cæsar. De bello Africano. Cap. 6. B.C. 44.

Caggiati. (*Vide* Linati and Caggiati.)

† Cagnola. Programmi per conferimento di premii dell' Istituto Lombardo, Accad. di Padova, Accad. di Torino, Istituto di Bologna. 4to. 6 pp. (*Giorn. dell' I. R. Ist. Lomb.* nuova serie, viii. 348. *Premio di Cagnola*, p. 349.) *Milano*, 1856

Cagnoli, Antonio. *Born September* 29, 1743, *at Zante; died August* 14, 1816, *at Verona.*

Osservazioni meteorologiche. 8vo. . . 7 vols. 1788-96

Calamai, L. Osservazioni sull' anatomia della Torpedine. 8vo. (*From Atti della 7ma Adunanza degli Scienziati Ital.* Parte Seconda, p. iv.) 1845

† Calamai, Owen and de Martino. (Sopra la sua.) "Memoria intitolata sull' anatomia della Torpedine, e sopra un gabinetto, &c. . . 4to. 5 pp. (*Atti 7 Adun. Scienziati Ital. pro* 1745.) *Napoli*, 1846

† Calamini e Platteretti. Delle pietre cadute nelle colli Parmigiane. Due lettere all' Editore. 4to. 4 pp. (*Nuova Scelta d' Opuscoli*, ii. 273.) *Milano*, 1807

† Calcinardi Rizeri, P. Tromba marina sul Lago di Garda. 8vo. (*Estratto di Lettere 8 Luglio e 1° Agosto.* (*Gior. dell' I. R. Istit. Lombar.* viii. 145.) *Milano*, 1843

Caldani, Floriano. *Born about* 1772, *at Bologna; died April* 11, 1836, *at Padua.*

Riflessioni sopra. . . Vasi assorbenti od esperienze sulla Elettricità animale. 8vo. 182 pp. (*Lette nell' Acad. . . di Padova.*) *Padova*, 1792

† Osservazioni sulla membrana del Timpano e nuove ricerche sulla Elettricità animale. 8vo. 198 pp. 3 pls. (*Lette nell' Acad. . . di Padova, con un' Appendice.*) *Padova*, 1794

Lettera nella quale si esaminano alcune riflessioni circa le nuove ricerche sulla Elettricità animale publicate nel tomo xvii. degli Opuscoli Scelti. . . 8vo. 16 pp. *Padova*, 1795

† Lettera (prima) allo Spallanzani sull' Elettricità animale. Padova 10 Agosto, 1793. 8vo. 21 pp. (*Ann. di Chim. di Brugnatelli*, vii. 138.) *Pavia*, 1795

† Lettera seconda allo Spallanzani sull' Elettricità animale. 7 Ap. 1794. 8vo. 14 pp. (*Ann. di Chim. di Brugnatelli*, vii. 186.) *Pavia*, 1795

† Lettera terza all' Spallanzani sull' Elettricità animale. 8vo. 6 pp. (*Ann. di Chim. di Brugnatelli*, vii. 208.) *Pavia*, 1795

Lettera all' Olivi sull' Elettricità animale. 8vo. 27 pp. (*Ann. di Chim. di. Brugnatelli*, vii. 159.) *Pavia*, 1795

Traduzione degli Elementi de Chimica di Chaptall sulla 3a. edn. con . . alcune annotazioni del traduttore. 4to. 8 vols. *Venezia*, 1801

Caldani, Leopoldo Marc-Antonio. *Born November* 21, 1725, *at Bologna; died December* 24, 1813, *at Padua.*

Sull' insensitivita od irritabilità di alcune parti degli animali. Lettera scritta al Sig. Haller. *Bologna*, 1757

Memorie lette nell' Acad. di Padova. 4to. *Padova*, 1804

† Memorie intorno alla vita od alle opere, etc. 4to. 79 pp. portrait. (*Mem. della Soc. Ital.* xix. *Pt. fis.* p. 1, 1823.) *Modena*, 1823

In this Mem. works of his (*L. C.*) *and of* Haller *on Irritability, &c. are much referred to, particularly "sull' insensitività ed irritabilità di alcune parti degli animali: Lettera scritta al* Sig. Alb. Haller, *dated Bologna*, 1757."

Caldecourt. (*Vide* Taylor and Caldecourt.)

† **Callan**, N. J. On the results of a series of experiments on the decomposition of water by the Galvanic Battery, with a view to obtain a constant and brilliant Lime Light. 8vo. 24 pp. (*Phil. Mag. February*, 1854.) *London*, 1854

† **Callaud**, A. Essai sur les Piles servant au développement de l'électr. Ouvr. couronné. 8vo. 54 pp. 1 plate. (*Ext. des Mémoires de la Société Impériale des Sciences, &c. . . . de Lille.*) *Paris*, 1860

Calogera, Angelo. Raccolta d'Opuscoli scientifici e filologici. 51 vols. of various dates. 12mo. Tom. i. 1728; tom. l. 1754; tom. li. 1757. *Venezia*, 1728-57

Note.—This collection was collated for Electricity, Magnetism, &c., 185—, *and the articles on those subjects were obtained by Sir Francis Ronalds.*

Nuova Raccolta d'Opuscoli scientifici e filologici. 42 vols. of various dates. 12mo. Tom. i. 1754; tom. xlii. 1787. *Venezia*, 1754-87

Cambridge Philosophical Society, Transactions of the. 4to. *Cambridge*, 1822

† **Cambridge U. S. University.** (*Vide* Farrar, 1839.)

Cambry, J. Traces du Magnétisme. 8vo. *La Haye*, 1784

Camerarius, R. J. De globo lucido meteoro. (*Ephem. Acad. Nat. Cur. Cent* 9 *et* 10.)

Camerer, J. W. Über das Einschlagen des Gewitters auf zwei mit Blitzableitern versehn Häusern. (*Tubing.-Blätter*, 1815, Bd. ii.) *Tubing.* 1815

† **Cameron**, Paul. Variation and deviation of the Compass rectified by azimuth and altitude tables. Likewise a treatise on Magnetism, and the deviations of the compass in iron ships, and the method of observing and correcting them by magnets. 3rd edition. 132 pp. *London*, 1868

† **Camin**, F. Da. Sull' Ago-puntura con alcuni Cenni sulla puntura elettrica. Lettere ed Osservazioni. 8vo. 45 pp. 1 plate. *Venezia*, 1834

† **Campos** Bautista, F. De la galvanocaustique chimique comme moyen de traitement des rétrècissements de l'urèthre. Thèse pour le Doctorat en Médecine soutenue 25 Fév., 1870. 4to. 162 pp. (*Faculté de Médecine de Paris.*) *Paris*, 1870

Camus. (*Vide* Le Camus and Le Comus.)

Canali, Luigi. *Born* 1759, *at Perugia; died December* 8, 1841.

Sopra i paragrandini di Tholard. (*Giorn. Accad.* xix.)

Lettera . . sopra un' esperienza di Muschenbrock, . . e gli effetti dell' attrazioni e repulsioni elettriche. 4to. 18 pp. 1 plate. (*Opuscoli Scelti*, 4to, xviii. 55.) *Milano*, 1795

Questions sur la loi découverte par Volta relativement à l'élect. des vapeurs: (1) Cette loi a-t-elle du rapport aux autres lois propres de cette fluide . . . (2) Les anomalies . . en blessent-elles la vérité. 4to. (*Mem. de Turin*, tom. vi. pt. ii. p. 61.) *Torino.*

Canini, Giuseppe Maria Simone. *Born October* 31, 1720, *at Venice; died August* 1, 1796, *at Venice.*

† Dissertazione istorica che assegna e scopre il vero tempo in cui il Canini intraprese, e dichiarò il suo fisico studio sopra l'artifizial Magnetismo et sopra l'attività degli Effluvi di quello per gli occorsi utili e considerabili Effetti. 8vo. 64 pp. *Venezia*, 1775

Lettera apologetica sopra l'azione dell' effluvio magnetico sui nervi. (*From Poggendorff*, i. 370.) 1785

A pamphlet of 14 pages in 12mo, without other title than "*Agli Amatori dell' Esperienze fisiche*," and without either date or place. The author describes his invention of an improved Magnet of "7 Corpi di finissimo Acciajo con vite, et placche d'Ottone connessi, in guisa, che formano un solo corpo, &c."

Canton, John. *Born July* 31, 1718, *at Stroud, Gloucestershire; died March* 22, 1772, *at London.*

On the Tourmaline. 8vo. (*The Gentleman's Magazine, September*, 1759, *and Phil. Trans., December*, 1759.) *London*, 1759

† **Cantoni**, Giovanni. Sunto di un corso di lezioni sui fenomeni elettrici e magnetici. 8vo. 114 pp. *Milano*, 1860

Sui fenomeni elettrici e magnetici; compendio di elettrologia. 16mo. 142 pp. (*Zuchold's Cat.*, 1866, p. 178.) *Milano*, 1864

† Sulle correnti d'induzione. Nota seconda. 8vo. (*Rendiconti del R. Instit. Lombardo*, ii. 256, 1865.) *Milano*, 1865

† Cenni sul. Prof. Belli. (*Vide* Belli.)

Cantu, Cesare. Notizia di G. D. Romagnosi. 8vo. *Milano*, 1835

Caplin, J. T. F. Origin and use of the Electro-chemical Bath. 8vo. *London*, 1856

† The Electro-chemical Bath for the extraction of . . . poisonous substances from the human body . . . and the relation of Electricity to the phenomena of Life, Health, &c. 8vo. 128 pp. *London*, 1856

† Selection of documents and autograph Letters in testimony of the Cures effected by the Electro-chemical Bath. 8vo. 140 pp. *London*, 1865

† Historical Records of the various affections cured by means of the Electro-Chemical Bath. 8vo. 284 pp. *London*, 1865

† **Capocci**, E. Seguito della Notizia alle scoperte di Melloni sul Calorico. 8vo. 17 pp. (*Bibliot. Ital.* lxxxix. 107.) *Milano*, 1838

† **Cappel**, A. J. L. Report on the Government Telegraph Department in Prussia. Fol. 54 pp. *London*, 1867

† **Capsoni.** Cenni storici sui Telegrafi elettrici. 8vo. 23 pp. *Milano*, 1850

Cara. Dissertation sur la Lumière et l'Electricité. 8vo. 86 pp. *London*, 1787

Caraffa, G. Sur la Tourmaline, lettre à M. Buffon. *Paris*, 1759

Caraffa. (*Vide* Noya-Caraffa.)

† **Caraman** (le Comte de). Observation sur un phénomène de l'atmosphère. Lu Nov. 1764. 4to. 3 pp. (*Toulouse Acad.*, 1*st Serie*, tom. i. *Hist.* p. 58). *Toulouse*, 1782

Carcassonne Bib. Publ. Catalogue. MSS.
This library contains few works on Electricity and Magnetism.

Cardanus, Giovanni. De fulgure. Liber unus. Fol. (*Cardani Geronimo Opera omnia*, 10 vols. folio, vol. ii.) *Lugd.* 1663

Cardell, F. P. Opusculum philosophicum de attractione magnetis. *Olomutiæ*, 1750

Carena, F. Expériences pour l'examen des deux principales théories de l'Electromoteur de Volta. 8vo. (*Bibl. Ital.* iv. 63.) *Turin*, 1804

Carette, A. M. Géométrie du compas. (Translated from Mascheroni's Work.) *Paris*, 1798

† **Cari**, Gaetano. Nuovo conduttore spirale, con la teoria sua. 8vo. 42 pp. 1 plate. *Pistoja*, 1783

Carl, P. Repertorium für physikalische Technik für mathematische und astronomische Instrumentenkunde. 8vo. *Munchen*, 1865

† Die electrischen Naturkräfte des Magnetismus, die Electricität und der galvanische Strom, mit ihren hauptsächlichsten Anwendungen. 8vo. 314 pp. *Munchen*, 1871

† Über die bisher in Anwendung gebrachten galvanometrischen Einrichtungen. 8vo. 24 pp. 3 plates. (*Carl's Repertorium*, iii. 136.) *Oldenbourg*

† **Carli**, G. Dissertazione . . intorno alla Declinazione o Variazione della Calamita e Bussola nautica dal Polo. 4to. 32 pp. 1 plate. *Venezia*, 1747

† Lettera sopra l'elettricità animale, o l'apoplessia. 4to. (*Opuscoli Scelti*, 4to. xv. 302.) *Milano*, 1792

† **C. A. de C.** (*i.e.* de Carli), (Comte). Transunto di una lettera del C. A. de C. sull' elettricità animale rapporto alla generazione. 4to. 4 pp. (*Opuscoli Scelti*, 4to, xix. 66.) *Milano*, 1796

Carlini, Francesco. (*Born January* 8, 1783, *at Mailand; died August* 29, 1862, *at Budeort Crodo.*)

† Sulla legge della variazione oraria del Barometro. Memoria. 4to. 43 pp., 1 plate. (*Ital. Soc. Mem.* xx. 189.) *Modena*, 1828

† Sulla luce zodiacale. 8vo. 1 page. (*Giorn. dell' I. R. Istit. Lomb.*, 8vo. i. 24.) *Milano*, 1841

† Piano di osservazioni magnetiche contemporanee in varii punti del globo. 8vo. 1 page. (*Giorn. dell' I. R. Istit. Lomb.*, 8vo. xiii. 19.) *Milano*, 1846

† Rapporto intorno agli esperimenti dell' elettricità del Magrini. 8vo. 2 pp. (*Giorn. dell' I. R. Istit. Lomb.* 8vo. xiv. 19.) *Milano*, 1846

Carlisle, Sir Anthony. *Born February* 8, 1769, *at Stillington, Durham; died November* 2, 1840, *at London.*

Decomposition of Water. Exp. with Nicholson, April 30, 1800. 8vo. (*Nicholson's Journal*, iv.) *London*, 1800

† **Carmeli**, L. M. Ragionamento fatto sopra il Fenomeno apparso la notte del dì 16 Dec. 1737. 8vo. 17 pp. (*Calogera, Raccolta* . . xviii. 463.) *Venezia*, 1738

Carmichael, J. S. Tentamen inaugurale medicum de paralysi. *Edinburgh* 1764

† On the Electric Fluids considered as different compounds of the Solar Rays. 8vo. 2 pp. (*Phil. Mag.* xli. 232.) *London*, 1813

Carminati, Bassiano. *Born about* 1750, *at Lodi; died at Milan.*

† Lettera al Galvani sull' Elettricità animale. 8vo. 7 pp. (*Giornale Fis. Med. di Brugnatelli*, ii. 115.) *Pavia*, 1792

Carmoy, —. Observations sur l'Electricité médicale. 8vo. (*Nouveaux Mém. de l'Acad. de Dijon.*) *Dijon*, 1784

Réflexions sur les effets des commotions électriques relativement au corps humain. 8vo. (*Nouv. Mém. de l'Acad. de Dijon*, 1785, 1er semestre, p. 112.) *Dijon*, 1785

Lettre à M. Marot sur les effets des commotions électriques. 8vo. (*Nouv. Mém. de l'Acad. de Dijon*, prem. semestre, p. 144.) *Dijon*, 1785

Réflexions sur l'électricité médicale. . . . (*Annales de la Soc. de Méd. de Montpellier*, tom. vii. part i. p. 297.) *Montpellier.*

Carnevale-Arella, A. (*Vide* Arella.)

Caroccio, A. Sulla scoperta elettrica del Dott. A. Palagi; discorso del Dott. A. Caroccio. Articolo estratto dal Giornale di Bologna il Commercio, Anno ii. No. 32, 33. . . .

† Carpi, P. Sull' influenza del magnetismo nelle chimiche combinazioni. Sperienze del Carpi. Presentato 13th February, 1826. 4to. 8 pp. (*Mem. Soc. Ital.* xx. 55, *Fisica.*) *Modena*, 1829

† Carpue, J. C. An introduction to Electricity and Galvanism; with cases, shewing their effects in the cure of diseases, to which is added a description of Mr. Cuthbertson's plate electrical machine. Substance of lectures. 8vo. 112 pp. 3 plates. *London*, 1803

Carradori, Gioachino. *Born June* 6, 1758, *at Prato Toscana; died Nov.* 24, 1818, *at Prato oder Pisa.*

† Riflessioni sull' esperienze dei Pacts Van Troostwyk e Dieman, sulla decomposizione dell' acqua. . . . 8vo. 18 pp. (*Ann. di Chim. di Brugnatelli*, tom. i. p. 1.) *Pavia*, 1790

† Lettere sopra l'Elettricità animale scritte a Felice Fontana. 8vo. 5 letters; the four first dated in 1792, 36 pp.; the fifth dated in 1793, 23 pp. (*Brugnatelli's copy.*) *Firenze*, 1793

† Articolo di lettera al Brugnatelli sull' elettricità animale e sopra alcuni nuovi sali metallici. 8vo. 3 pp. (*Ann. di Chim. di Brugnatelli.* v. 27.) *Pavia*, 1794

† Lettera sull' Elettricità animale . . . ad un amico. 8vo. 9 pp. (*Ann. di Chim. di Brugnatelli*, viii. 140.) *Pavia*, 1795

† Articolo di Lettera sopra l'Elettricità animale . . . al Vitoni, B. 8vo. 5 pp. (*Ann. di Chim. di Brugnatelli*, ix. 35.) *Pavia*, 1795

† Lettera sopra l'Elettricità animale scritta al Fontana (dated) da Prato, 24 Luglio, 1795. 8vo. 10 pp. (*Giorn. Fisico-Med.* An. viii. tom.) *Pavia*, 1795

† Esperienze ed Osservazioni sul fosforo delle Lucciole (Lampiris Italica). 8vo. 25 pp. (*Ann. di Chim. di Brugnatelli*, xiii. 41.) *Pavia*, 1797

† Lettera sopra la pretesa Elettricità animale scritta al Volta. 8vo. 7 pp. (*Ann. di Chim. di Brugnatelli*, xv. 63.) *Pavia*, 1798

† Intorno alla causa della termossidazione dei metalli. . . Articolo di Lettera al Fabbroni. 1 Agosto, 1801. 8vo. 11 pp. (*Ann. di Chim. di Brugnatelli*, xxi. 31.) *Pavia*, 1802

† Annotazione all' opinione del Coulomb sul magnetismo universale. 8vo. 3 pp. (*Ann. di Chim. di Brugnatelli*, xxi. 42.) *Pavia*, 1802

Carradori—*continued.*

† Osservazioni sopra alcune esperienze contrarie alla teoria di Lavoisier, fatte colla pila. 8vo. 9 pp. (*Ann. di Chim. di Brugnatelli*, xxi. 64.) *Pavia*, 1802

Expériences et observations pour démontrer que la décomposition de l'eau par la pile . . n'est pas prouvée. 4to. (*Journ. de Phys.* An. xii. p. 20.) *Paris*, 1804

† Esperienze per dimostrare che non è provata la decomposizione dell' acqua per mezzo della pila di Volta. 4to. 10 pp. (*Nuova Scelta d'Opuscoli*, 4to. i. 29.) *Milano*, 1804

† Sperienze ed Osservazioni sopra l'Irritabilità della Lattuga . . (Presentata . . 19 Luglio, 1804.) 4to. 9 pp. (*Mem. Soc. Ital.* vii. 30. pt. i.) *Modena*, 1805

† Istoria del Galvanismo in Italia o sia della contesa fra Volta e Galvani e Decisione ricavata dai fatti esposti dai due partiti. 8vo. 72 pp. *Firenze*, 1817

Memoria sull' azione del fluido elettrico, o galvanico come medicamento. (*Giorn. della Soc. Med. Chirurg. di Parma*, xiii. 33.)

† Notizie risguardanti la vita e studi del Dottore Giovacchino Carradori scritte dal . . . G. Raddi. Ricevute 3 Giugno, 1820. 4to. 8 pp. Portrait. (*Mem. della Società Ital.* tom. xix. p. 1.) *Modena*, 1821

† **Carrara, M.** Sulla fosforescenza della Lucciola . . . 8vo. 14 pp. 1 plate. (*Bibliot. Ital.* lxxxii. 357.) *Milano*, 1836

Carrié, Abbé, Hydroscopographie et metalloscopographie, ou art de découvrir les eaux soutorraines et les gisements métallifères au moyen de l'électro-magnétisme. 8vo. *Paris*, 1863

† **Carruthers.** (*Vide* Chambers & Carruthers.)

Carthenser, Johann Friedrich. *Born September* 29, 1704, *at Hayne Grafsch, Stolberg; died June* 22, 1777, *at Frankfurt a. d. O.*

Dissertatio de incitamentis motuum naturalium externis. 4to. *Erfurt*, 1765

† **Cartwright and Sturgeon.** On electro-type from engraved copper plates. 8vo. 3 pp. 1 plate. (*Annals of Electricity*, v. 236.) *London*, 1840

Casa. (*Vide* Della Casa L.)

Casali, G. De quorumdam vitrorum fracturis. Sermo alter, quo diluuntur objecta nonnulla quæ J. B. Scarella protulerat adversus sermonem primum. 4to. (*Comm. Bonon.* v. 1767.) *Bonon*, 1767

† **Casari,** L. Sopra la grandine straordinaria caduta in Padova nel giorno 26 Agosto di questo anno. Memoria. 4to. 8 pp. (*Ann. del Reg. Lomb.-Veneto*, iv. 337.) *Padova*, 1834

Sulle varie intensità delle correnti Voltiane . . . *Vienna*, 1835

† **Casati,** P. La Tromba parlante, le sue ragioni fisiche e matematiche. 4to. *Parma*, 1673

Mechanicorum, libri viii. . . 4to. *Lugduni*, 1684

Caselli et Bonelli. Description des télégraphes de, par Du Moncel. (*Vide* Du Moncel.) 1863

Cassal, L. E. T. Essai sur les causes et Théorie du Magnétisme. 8vo. 120 pp. 3 plates. *Colmar*, 1867

† **Cassano,** Prince, **Poleni,** Marquis, **Zanotti, De Revillas, Short** and **Fuller.** A collection of the observations of the remarkable Red Lights seen in the air on December 5, 1737, sent from different places to the Royal Society. 4to. (*Phil. Trans.* xli. p. 583 to 605.) *London*, 1739-40-41

Casselmann, Wilhelm Theodor. *Born August* 1, 1820, *at Rinteln.*

Über den Einfluss des Gewitters auf die Drähte electromagnetischer Telegraphen. 8vo. (*Poggendorff, Annalen*, lxxiii. 1848). *Leipzig*, 1848

Über die galvanische Kohlenzinkkette und einige mit derselben angestellten Beobachtungen. (*Inaugural Dissertation.*) 8vo. 76 pp., 5 engraved tables. (*Heinsius von Schiller*, iii. 149.) *Marburg*, 1843

Cassini, Giovanni Domenico. *Born June* 8, 1625, *at Perinaldo Grfsch. Nizza; died September* 14, 1712, *at Paris.*

Sur un nouveau phénomène ou sur une lumière céleste (Mar. 18, 1683). (*The Zodiacal Light.*) 4to. (*Anc. Mém. de Paris*, i. and viii. and x). *Paris*

† Spina celeste meteora observata in Bologna, Marzo, 1668. 4to. 20 pp. 1 plate. *Bologna*, 1668

Cassini, Jacques. *Born February* 18, 1667, *at Paris; died April* 16, 1756, *at Thury b. Clermont, in Beauvoisis.*

Observations sur la déclinaison de l'aimant. 4to. (*Mém. de Paris*, vii. p. 508.) *Pari.*

Observations de la déclinaison de l'aimant, faites à Londres en 1698. 4to. (*Mém. de Paris*, vii. p. 572.) *Paris*

Observations de la déclinaison de l'aimant faites dans un voyage de France aux Indes Orientales, et dans le retour des Indes en France pendant les années 1703 et 1704. 4to. (*Mém. de Paris*, 1705, *Mém.* p. 80.) *Paris*, 1705

Réflexions sur les observations de la variation de l'aimant faites dans le voyage du légat du Pape à la Chine l'an 1703. (*Mém. de Paris*, 1705, p. 8.) *Paris*, 1705

Réflexions sur la variation de l'aimant, observée par Houssaye Capitaine commandant le vaisseau l'Aurore, pendant la campagne des Indes Orientales faite par l'escadre des vaisseaux, commandée par le Baron de Psallières e. 1704 et 1705. 4to. (*Mém. de Paris*, 1708, p. 173.) *Paris*, 1708

Réflexions sur les observations de la variation de l'aimant, faites sur le vaisseau le Maurepas, dans le voyage de la mer du Sud; avec quelques remarques de M. de la Verune, sur la navigation des côtes de l'Amérique et de la Terre de Feu. 4to. (*Mém. de Paris*, 1708, p. 292.) *Paris*, 1708

De l'aurore boréale qui a paru le 16 Nov. de l'année 1729. 4to. *Mém. de Paris*, An. 1729, *Hist.* p. 1, *Mém.* p. 321.) *Paris*, 1729

Observation sur la variation de l'aimant à la Guadeloupe. 4to. (*Mém. de Paris*, vii. p. 455.) *Paris*

Observation sur la variation de l'aimant à La Martinique. 4to. (*Mém. de Paris*, vii. 456.) *Paris*

† **Cassini**, Jacques Dominique. *Born June* 30, 1748, *at Paris; died October* 18, 1845, *at Thury-sur-Clermont, Dép. Oise.*

De l'influence de l'équinoxe du printemps et du solstice de l'été sur la déclinaison et les variations de l'aiguille aimantée. Lettre à l'Auteur du Journ. de Physique, Avril, 1784. 4to. 64 pp. 2 plates. *Paris*, 1791

Observation sur un météore en forme de globe de feu de la grandeur de la lune, vu en 1687 (d. 21 May). 4to. (*Mém. de Paris*, ii. 74.) *Paris*

Observations sur la déclinaison de l'aimant à Rome. (*Mém. de Paris*, vii. 503.)

Déclinaison de l'aimant à Gênes. (*Mém. de Paris*, vii. 530). *Paris*

† **Cassius Larcher, Daubincourt, et De Saintot.** Précis succinct des principaux phénomènes du Galvanisme; suivi de la traduction d'un commentaire de J. Aldini sur un mémoire de Galvani ayant pour titre "Des forces de l'Electricité dans le mouvement musculaire" (ouvrage très rare et qui n'a point encore été traduit): et de l'Extrait, d'un ouvrage de Vassalli Eandi ayant pour titre "Observations sur le fluide de l'Electromoteur de Volta." 8vo. 52 pp. *Paris*, 1803

† **Cassola, F.** Nuovi sperimenti sui raggi magnetici. 8vo. 3 pp. (*Bibliot. Ital.* lix. 129.) *Milano*, 1830

Castberg, P. A. Mémoire sur les effets du galvanisme appliqué aux sourds-muets, dans différents endroits de l'Europe. (*From Sue, Hist.* iv. 264).

Om Galvanismens medicinska Nytte. (*Rafn's Nyt Bibl.* iv.)

Castelli, C. Dissertazione sull' origine delle straordinarie meteore dell' anno 1783 e sulla maniera d' impedire i fulmini e le grandini. 8vo. (*From MS. Catalogue, Padua Academy.*) *Milano*

† Congetture sull' origine dei nocevoli effetti della Brina, &c. 8vo. 24 pp. (*Volta's copy.*) *Milano*, 1793

† **Castro, M. F. de.** La Electricidad y los caminos de Hierro. . . Parte II. Los caminos de Hierro. 8vo. 504 pp. *Madrid*, 1858

Descripcion de un sistema de señales eléctricas para evitar Accidentes en los Caminos de Hierro, y exámen de los demás sistemas eléctricos propuestos. 4to. 216 pp. *Madrid*, 1858

† La Electricidad y los Caminos de Hierro. Descripcion y examen de los sistemas propuestos para évitar Accidentes en los Caminos de Hierro por medio de la electricidad precedidos da una reseña historico-elemental de esta ciencia y de sus principales aplicaciones. Impresa de Real Orden. Parte I. La Electricidad. 8vo. 573 pp. (*Ronalds' Teleg. alluded to at p.* 463.) *Madrid*, 1857

† L'Electricité et les Chemins de fer. Description et examen de tous les systèmes proposés pour éviter les accidents sur les Chemins de fer au moyen de l'électricité. Précédé d'un resumé historique élémentaire de cette science, et de ses principales applications. Publié par ordre du Gouvernement Espagnol. 8vo. 2 vols.: 1st. 4 and 610 pp.; 2nd. 542 pp. *Paris*, 1859

Cat. (*Vide* Le Cat.)

Catania Accademia Gioenia. Atti dell' Accademia Gioenia di Scienze naturali. 4to. 1833-44, comprising 15 vols. of the 1st series. *Catania*, 1833-44

Catherman, F. Vocabulaire télégraphique universel, ou moyen de converser entre personnes de différentes nations sans en connaître les langues . . . Suivi d'un système de signaux de nuit et de brume. 8vo. 32 pp. 1 plate. *Paris*, 1855

† **Cattaneo, F.** Riflessioni intorno alle azioni inducente e magnetizzante delle correnti elettriche . . . della scarica della boccia di Leida. 8vo. 13 pp. (*Giorn. dell' I. R. Instit. Lomb.* iv. 43.) *Milano*, 1842

† **Cauderay, H.** Le Télégraphe entre l'ancien monde et le nouveau; suivi du Télégraphe sans Pile dans les bureaux intermédiaires. 8vo. 24 pp. 1 plate. *Lausanne et Paris*, 1861

Manuel pratique de télégraphie électrique. *Lausanne et Paris*, 1862

† **Caullet de Veaumorel.** Description de la machine électrique négative et positive de M. Nairne. Avec des détails de ses applications à la physique, et principalement à la médecine ; traduite de l'Anglois. 12mo. 179 pp. 5 plates. *Paris*, 1784

Caumond. De l'influence des météores . . . sur la production des maladies. 4to. (*From Arago's Sale Cat.* p. 56.) *Montpellier*, 1802

Caumotte. Description d'un phénomène observé à Marseille le 15 Fév. 1730. 4to. 2 pp. (*Montpellier Acad. Hist. &c. par De Ratte*, vol. i. p. 332.) *Lyon*, 1766

Causland, Robert. Conjectures on some phenomena of the Barometer, &c. *Edinburgh*, 1788

† **Cavalleri, G. M.** Applicazione dell' elettricità alla cura della paralisi. Memoria. Letta 24 Agos. 1854. 4to. MS. Copia autentica della Mem. stampata in Milano. Tratta dagli Atti o Memorie del Accad. fisio-medico-statistica. 1854

Cavalleri, G. M.—*continued.*

† Osservazioni sulla cura della paralisi per mezzo dell' elettricità. Letta 19 Marzo, 1857. 8vo. 14 pp. (*Accad. fis.-med.-statistica di Milano.*) *Milano*, 1857

† Della elettricità che sviluppano le vario stoffe degli abiti a contatto dell' aria, di loro stesso e del corpo umano. Memoria. Letta 8 Aprile, 1858, all' Accad. fisio-med.-statistica di Milano. 8vo. 16 pp. *Milano*, 1858

† Sulla luce problematica che manifestasi in tutto il cielo nel passaggio delle stelle cadenti in Agosto e Novembre, e di una proposta diretta a scoprirne l'origine. Nota. 8vo. 10 pp. (*Estratto dai Rendiconti del Reale Istituto Lombardo, Ch. di Scienz.* vol. iv. fasc. iii.) *Milano*, 1868

† Sulla Tromba che devastò le vicinanze di Monza il giorno 30 Giugno, 1865. Memoria. 8vo. 23 pp. (*Rendiconti del R. Instit. Lombardo*, ii. 231.) *Milano*, 1865

Cavalli, Atagio. Lettere meteorologiche Romane. 8vo. (*Effect of Atmospheric Electricity on the Human Body.*) *Roma*, 1785

Cavallo, Tiberius. *Born March* 30, 1749, *at Naples; died December* 21, 1809, *at London.* (*From Poggendorff*, i. 405. *Phil. Mag.* xxxiv. 470 *says Dec.* 26.)

Extraordinary electricity of the atmosphere observed at Islington. 4to. (*Phil. Trans.* 1776.) *London*, 1776

† A complete Treatise on Electricity in theory and practice. 1st edition. 8vo. 412 pp. 3 plates. *London*, 1777

† Volständige Abhandlung der theoretischen und praktischen Lehre von der Electricitat; aus dem Englischen. (*V. I. S. Tr. Gehler.*) 3 editions. 8vo. 284 pp. 3 plates. *Leipzig*, 1779-83-85

† Trattato completo di Elettricità . . . tradotto con Addizioni e cangiamenti fatti dall' Autore. 8vo. 511 pp. 3 plates. *Firenze*, 1779

† Vollodige Verhandeling over de Elektriciteit . . . wit het Engelsch vertaald, en verrykt met byvoegselen en verboteringen, door den Schryver medegedeld; aan J. Th. Rossijn . . . 8vo. 339 pp. 3 plates. *Utrecht*, 1780

† Essay on the Theory and Practice of Medical Electricity. 1st edition. 8vo. 112 pp. 1 plate. *London*, 1780

† An Essay on the theory and practice of Medical Electricity. 2nd edition. 8vo. 124 pp. 1 plate. *London*, 1781

† Versuch über die Theorie und Anwendung der medicinischen Electricität. Aus dem Engl. übersetzt. 8vo. 34 pp. 1 plate. *Leipzig*, 1782

† Teoria e Pratica della Elettricità medica: e della forza dell' elett. nell cura . . . di G. Birch tradotta dall' Inglese . . . preceduta dall' Istoria elettrica . . . del Vivenzio. 4to. *Napoli*, 1784

† Volständige Abhandlung der theoretischen und praktischen Electricität nebst einigen Versuchen. Aus dem Engl. übersetzt. Dritte mit einigen Zusätzen des Übersetzers vermehrte Auflage. 8vo. 344 and 10 pp. 4 plates. *Leipzig*, 1785

† Traité de l'Electricité traduite de l'Anglois sur la 2me et dernière edition (par Silvestre). 8vo. 343 pp. 4 plates. *Paris*, 1785
Some of the notes are not designated as those of the translator, yet are such.

† Treatise on Magnetism, in theory and practice . . . 1st edition. 8vo. 343 pp. 2 plates. *London*, 1787

A complete Treatise, &c. on Electricity. 8vo. (*From Watt.*) *London*, 1787

Theoret. practische Abhandlung der Lehre von Magnet. aus dem Englischen. 8vo. *Leipzig*, 1788

Cavallo—*continued.*

† Supplement to the treatise on Magnetism. 8vo. 72 pp. 4 plates. *London*, 1795

† A complete Treatise on Electricity in theory and practice . . . The 4th edition in 3 vols., containing the practice of Medical Electricity, &c. . . . The 3rd vol., new . . . contains Discoveries, &c. since the 3rd edition. 8vo. *London*, 1795

† Volständige Abhandlung der . . . Elektricität . . . aus dem Englischen übersetzt und mit Anmerkungen und Zusatzen begleitet. 4to. vermehrte. . . Aufl. in 2 Bänden. (Von J. M. W. Baumann.) 2 vols. 8vo. *Leipzig*, 1797

Versuche über die Theorie und Anwendung der Medecin-Electricität aus dem Englischen. 8vo. *Frankfort u. Leipsig*, 1799

† Treatise on Magnetism in Theory and Practice. 3rd edition, with a Supplement. 8vo. 335 pp. 3 plates. *London*, 1800

A complete treatise on Electricity. . . New edition. 5th edition. 8vo. (*From Watt.*) *London*, 1802

† Elements of Natural Philosophy. 4 vols. 8vo. *London*, 1803

Darstellung der Lehre der Elektricität des Galvanismus und Magnetismus aus dem Engl. 8vo. *Erfurt*, 1806

† **Cavallo and Cuthbertson.** The Articles: Electric, Electrical, Electricity, Electrometer, Electrophorous, Electrum, &c., in Rees's Cyclopædia, vol. xii. 4to. 51 pp. 55 plates. *London*, 1809

Cavendish, Hon. H. Life and Works of. By Dr. G. Wilson. 8vo. *London*, 1851

An attempt to explain some of the principal phenomena of Electricity by means of an elastic fluid. 4to. (*Phil. Trans.* 1771.) *London*, 1771

† **Cazalis**, F. Lettres médicales sur la galvano-puncture. Traduites de l'Italien. 8vo. 15 pp. *Montpellier*, 1846

Cazélis. (*Vide* Masars-de-Cazélis.)

† **Cecchi.** Saggi di naturali esperienze fatte nell' Accademia del Cimento. 2nd edition. Folio, plates and portrait. *Firenze*, 1691

Appareil d'induction. Modification of Ruhmkorff's. (*La Ricreazione, journal des sciences physiques de Florence.*) *Florence.*

Armatures électro-aimants de M. Cecchi. (*In a note to La Ricreazione.*)

Cellio, Marco Antonio.

De terra magnete. (*From Watt.*) 4to. *Gryphisu*, 1692

Celsius, A. *Born November* 27, 1701, *at Upsala; died April* 25, 1744, *at Upsala.* (*Poggendorff*, i. 410.)

316 Observationes de lumine boreali ab an. 1716 usque ad 1732 in Suecia habitæ. 4to. 48 pp. 1 plate. *Norimbergæ*, 1733

Meteorum ignitum die 3 Martii an. 1731 Upsaliæ observatum. (*Acta Litt. Suecie*, an. 1734, p. 78.) 1734

Observatio de lumine in barometro. (*Act. Litt. Suec.* 1734.) 1734

Observations of the Aurora Borealis made at London September 14 and October 4, 1735. 4to. (*Phil. Trans.* an. 1736, p. 241.) *London*, 1736

Observationes de lumine boreali ad circulum polarem habitæ, an. 1736. (*Acta Litterar. et Scient. Sueciæ*, an. 1737, p. 254.) 1737

Inclinatio acus magneticæ observata Tornea ad latit. 65° 51′. (*Acta Litterar. et Scient. Sueciæ*, an. 1738, p. 428.) 1738

Observationes de lumine boreali anno 1739 factæ. 4to. (*Mem. de Mathemat. et de Phys.* iv. 137.) *Paris*

Celsius—*continued.*

† Anmerkungen über die stündlichen Veränderungen der Magnet-Nadel in ihrer Abweichung. 8vo. 4 pp. (*Schwedische Akad. Abhandl.* an. 1740, p. 45, vol. ii.) *Hamburg*, 1740

† Von der Miswoisung oder Abweichung der Magnetnädel von dem Nordstriche angemerkt in Upsal, von A. C. 8vo. 4 pp. (*K. Schwed. Akad. Abh.* ii. 161. *Swedish version.*) *Hamburg*, 1740

† Neigung der Magnetnadel zu Upsal, von A. C. beobachtet. 8vo. 8 pp. *K. Schwed. Akad. Abh.* vi. 10. *Swedish version.*) *Hamburg*, 1744

† Denkmal. Herrn Prof. Andreas Celsius. 8vo. 8 pp. (*K. Schwed. Akad. Abh.* viii. 143.) *Hamburg*, 1746

Celsius and Hiortær. Observations of the needle at Upsala. Auroral influence. *Vide* Hiorta, pp. 36, 37, &c. (*Mém. de Suède*, tom. ix. p. 37.) 1746

Cèpede. (*Vide* La Cèpède.)

† Ceppi. Dissertatione serio-giocosa sull' Elettricità artificiale . . . 8vo. 345 pp. 13 plates. *Vercelli*, 1784

Cerini, Giuseppe. Impossibilità fisico-chimica del paragrandine. *Milano*, 1821

† Cernuschi, C. Descrizione del Telegrafo elettro-magnetico di Morse adottato anche a Milano . . 2nd edn. 8vo. 36 pp. and Table. 3 plates. *Milano*, 1852

Cervelleri, Filippo. De galvanismi acupuncturæ magneticæ conjuncti nonnullis in nervorum morbis præstantia. Epistola. 8vo. *Napoli*, 1839

De l'emploi de l'Electro-magnétisme dans les maladies des nerfs, etc. 8vo. *Naples*, 1840

Cesaris, Giovanni Angelo. (*Born October* 30, 1749, *Casale Pusterlengo, Territorio Lodigiano; died April* 18, 1832, *at Mailand.*)

† Sul movimento oscillatorio e periodico delle fabbriche. 8vo. 12 pp. (*Effemeridi astronomichi di Milano per* 1813. *Appendice*, p. 105.) *Milano*, 1812

Note.—Placed here because such oscillations should affect magnetic *Observations materially.*—F. R.

† Continuazione delle osservazioni sul movimento oscillatorio e periodico delle fabbriche. 8vo. 8 pp. (*Effemeridi astronomichi di Milano per* 1816. *Appendice.*) *Milano*, 1815

Cesi, In. De Meteoris dissertatio. (*From Pogg.* i. 413.) *Mantua*, 1700

† Cézanne, E. Le Câble transatlantique. 18mo. 72 pp. (*Conférences faites à la gar St.-Jean à Bordeaux.*) 1867

† Challis, J. Hydrostatat, &c. Whewell. Elektricität und Wärme. Christie. Erd Magnetismus. 8vo. 155 pp. *Berlin*, 1838

Note.—All from Report of third and fifth meetings of the British Association, translated by Kloden.

† Chalmers. An account of an extraordinary Fire-ball bursting at sea, communcated by Chalmers. Read March 22nd, 1749. 4to. 2 pp. (*Phil. Trans* xlvi. 366.) *London*, 1749-50

† Chalmers, C. Thoughts on Electricity; with Notes of Experiments. Third edition. 8vo. 57 pp. 2 plates. (*First Edition published in* 1849.) *Edinburgh*, 1851

† Electro-Chemistry with Positive Results; and Notes for inquiry on Geology, &c. . 8vo. 100 pp. *London*, 1858

Chamberlayne, Jno. On the effect of Thunder and Lightning at Stampford, Courtney, in Devonshire. 4to. (*Phil. Trans.* 1712. *London*, 1712

Chambers, Ephraim. *Born . . . at Kendal, Westmoreland; died May 15th*, 1740, *at Canonbury House, Islington.*

Cyclopædia, or an Universal Dictionary of Arts and Science. (*Poggendorff*, i. 117.) *London*, 1728

Dictionary of Arts, &c., Supplement by Rees. 4to. *London*, 1786

Chambers. An article founded upon Experiments, &c., exhibited to him by Mr. Wheatstone. (*Chambers' Edinburgh Journal, 25th July.*) 1840

† **Chambers**, W. and R. The Electric Telegraph. 8vo. 4 pp. (*Chambers's Journal*, 4th series, No. 348, August 27, 1870.) *London*, 1870

† **Chambers**, R. On Luminous Insects. Mention of a Paper read at the Linnæan Society, April 20, 1830. (*Phil. Mag. or Annals*, vii. 357.) 1830

Chambers and **Carruthers.** Cyclopædia of English Literature; being a History, Critical and Biographical, of British Authors, from the earliest to the present times; with specimens of their Writings. 2 vols. 8vo. (*From the Athenæum, July 29th*, 1871.) 1871

Chamolle. Les électro-moteurs. 16mo. 40 pp. *Besançon*, 1857

Changeux, P. N. Météorographie, ou l'art d'observer les phénomènes de l'atmosphère. *Paris*, 1781

Channing, W. F. Notes on the Medical Application of Electricity. 3rd Edition. 8vo. 199 pp. *Boston, U.S.*, 1852

† The Municipal Electric Telegraph . . . Application to Fire Alarms. 8vo. 28 pp. Cuts. (*American Journal of Science*, vol. xiii. 2nd series.) *New Haven, U.S.*, 1852

† **Chantrel**, J. Le Télégraphe électrique. 12mo. 71 pp. Cut. *Lille*, 1858

Le Télégraphe électrique. 3me édition. 18mo. 71 pp. 1 plate. *Lille*, 1865

† **Chapot**, L. Du Galvanisme en général . . (*Thesis.*) 4to. 57 pp. *Montpellier*, 1842

† **Chapot-Duvert**, C. De quelques applications de l'électricité à la thérapeutique. Courants continus, Bains électrisés. 8vo. 69 pp. *Paris*, 1870

Chappe, Claude. *Born* 1763, *at Brûlon-le-Maine, Département de la Sarthe; died January 23rd*, 1805, *Paris.*

Lettres (de Chappe et d'Aymer) sur le nouveau télégraphe (de Bréguet et Bétancourt.) 8vo. *Paris*, 1793

Chappe, Ignace Urbain Jean. *Born* 1760, *at Rouen; died Jan. 26*, 1829, *at Paris.*

Histoire de la télégraphie. 1st edition. 2 vols. 8vo. *Paris*, 1824

† **Chappe**, l'aîné, Ign. U. J. Histoire de la télégraphie . . . précédée.

1. De l'Origine du télégraphe Chappe.
2. D'observations sur la possibilité de remplacer le télégraphe aérien par un télégraphe acoustique.
3. Des motifs que ont obligé les Chappe à demander leur retraite.

8vo. 268 pp. and atlas de 34 plates. *Le Mans*, 1840

(*On false magnetic telegraphs he refers* (*at p.* 38) *to Paracelsus, Maxwell, and Santinelli mentioned in the Dictionnaire des Sciences Médicales, verbo Magnétisme.*)

Chappe d'Auteroche, Jean. *Born* 1722, *March 2, at Mauriac-Auvergne; died Aug. 1*, 1769, *at St. Lucar, California.*

Observations sur l'orage du 6 Août, 1767, et d'un coup de foudre qui s'est élevé de la terrasse de l'Observatoire. 4to. (*Mém. de Paris*, 1767, *Mém.* p. 344.) *Paris*, 1767

Chappe d'Auteroche—*continued.*

† Voyage en Californie pour l'Observation de Vénus sur le disque du Soleil le 3 Juin, 1767. . . . Rodigé et publié par M. Cassini fils. . . . 4to. 170 pp. 4 plates.

(*On Lightning* (*as ascending*), *p.* 31, *and reference to same subject in his Voyage en Sibérie. On Declination and Inclination, p.* 45.) *Paris*, 1772

Voyage en Sibérie. (*Pogg.* i. 420, *says* 3 vols. 4to. *Paris*, 1763.)

Chappe, Robillard, and Sylvestre. Repetition of Galvani's and Valli's Experiments as Commissioners of the Soc. Philomatique. (*Bulletin des sciences de la Soc. Philomath. Mars*, 1793, No. 21.) *Paris*, 1793

† **Chappelsmith, J.** An account of a Tornado near New Harmony, Indiana, April 30, 1852, with a map of the Track, &c. 4to. 12 pp. 1 map and 1 plate. (*Smithsonian Contributions*, vii.) *Washington*, 1855

Chaptal, Jean Antoine Claude. *Born June* 4, 1756, *at Nogaret, Dép. de la Lozère; died July* 30, 1832, *at Paris.*

Observations sur l'influence de l'air et de la lumière dans la Végétation des Sels. 4to. (*Toulouse Acad.* 1re serie, tom. iii. p. 335.) *Toulouse*, 1778

† Fall of Acrolitos near Toulouse on the 10th April, 1812. 8vo. (*Phil. Mag.* xl. 315.) *London*, 1812

Fragment de la Lettre . . . par Chaptal, de Montpellier le 11 Dec., 1786. (*Lyons Acad. Hist. par Dumas*, i. 166.) 1839

Charante, Nicolaus Henrik van. *Born* 1821, *at Rotterdam; died* 1847, *at Rotterdam.*

† Dissertatio physicus inauguralis continens Disquisitiones quasdam experimentales et theoreticas circa Magnetismum rotatione excitatum. 8vo. 80 pp. 1 plate. (*Acad. Lugd. Bat.*, 5 *Junii*, 1844.) 1844?

† **Charault, R.** Thèse. Recherches sur la déperdition de l'électricité statique par l'air et les supports. 4to. 36 pp. *Paris*, 1860

Charleton, W. Disquisitiones duæ chymico-physicæ; prior, de fulmine. 12mo. (*Inquisitiones ii anatomico-physicæ; prior de fulmine. . . .*) *London*, 1665

Charlton. A Ternary of Paradoxes, &c. . . . Magnetic Cure of Wounds, &c. 4to. (*From Watts.*) *London*, 1650

Charpentier, F. P. *Died in* 1817. Erfand . . . eine neue Signal-Laterne. . . . &c.

† **Chase, P. E.** On the numerical relations of gravity and magnetism. Magnetic premium awarded Dec. 16, 1864. 4to. 20 pp. (*Trans. Amer. Phil. Soc.*, xiii. 117.) (*Faraday's copy.*) *Philadelphia*, 1864

† Experiments upon the mechanical polarization of Magnetic Needles, under the influence of fluid currents or "Lines of Force." 8vo. 16 pp. (*Proceedings of the Amer. Phil. Soc. July* 21, *Oct.* 6, *and Nov.* 3, 1865.) *Philadelphia*, 1865.

Chaudron, Junot J. Notice sur la réduction, par voie électro-chimique, du silicium, &c., du tungstène, de l'aluminium et des autres métaux considérés jusqu'ici comme irréductibles, et sur leur application aux arts et à l'industrie. 8vo. 20 pp. *Paris*, 1855

† Argyrolithe . . . Réduction par voie électro-chimique . . . des métaux. 8vo. 216 pp. *Paris*, 1855

Chaumont, (Secretary). Analyse des travaux de la classe des Sciences pendant l'année 1823. Notice de Marq. Victor "Plan d'Observations . . . pour connaître la marche diurne de l'Aiguille aimantée," p. 17. 8vo. (*Toulouse Acad.*, 2me séric.) *Toulouse*, 1830

† Analyse des travaux de la classe des Sciences pendant l'année 1824. Notice de Dralet Jan. 29, 1824, sur une Trombe du 25 Janv. (N.N.E. de Toulouse) avec Foudre et Éclair. 8vo. (*Toulouse Acad.* 2me série, tom. ii. p. 47.) *Toulouse*, 1830

Chaumont—*continued.*

† Analyse des travaux de la Classe des Sciences pendant l'année 1835. Reference to Boisgeraud, "Quelques Observations sur la Grêle" (*with Thunder, &c., about* 1834). 8vo. pp. 99. (*Toulouse Acad.* 2me série, tom. iv. p. 96.) *Toulouse*, 1837

† Analyse des travaux de la Classe des Sciences pendant l'année 1836. 8vo. (*Notice of Quatrefage's "Action de la Foudre sur des Etres organisés," Toulouse Acad.* 2me serie, tom. iv. p. 197.) *Toulouse*, 1837

Chauvancy. (*Vide* Reynold-Chauvancy.)

Chauveau (di Lyon). On contractions in the back of a frog produced from the action called *réflexes*. . . . (*From Matteucci.*)

Chauvelot, S. Introduction à l'Electricité, avec des explications à nombre de phénomènes de chimie, de physique et économie animale. *Madrid*, 1788

Chavarri y Rico y Sinobas. Memoria sobre el plan que podria adoptarse para verificar estudios meteorológicos en España, presentada al Director general de instruccion publica. 8vo. *Madrid*, 185- ?

Chemical Society. Instituted 1841.
1850 to 1862, Quarterly Journal. 15 vols. 8vo.
1863 to Monthly. *London.*

Chenot, Adn. Les chaudières à vapeur sont des machines électriques. *Paris*, 1844

Cherbourg. Mémoires de la Société de Cherbourg. *Cherbourg*

Cherest, E. Notice sur la télégraphie électrique. 36 pp. 8vo. *Espinal*, 1853

† **Chernak, L.** Dissertatio physica de theoria electricitatis Franklini . . 4to. 46 pp. (*Thesis read at Harlem, May* 4, 1771.) *Groninga*, 1771

† **Cheron** et **Moreau-Wolf.** Des services que peuvent rendre les courants continus constants dans l'inflammation, l'engorgement et l'hypertrophie de la prostate. 8vo. 31 pp. (*Extrait de la Gazette des Hôpitaux.*) *Paris*, 1870

Chevalier. Patent Electric and self-recording Target. No mantlets required (*From the "Times," Oct.* 16, 1861.)

Chevallier, Jean Gabriel. (*Born September* 13, 1778, *at Mantes; died February* 1848, *at Paris.*)

Instruction sur les paratonnerres. *Paris*, 1823
(*Vide also* Salle.)

Chevreul, M. E. De la baguette divinatoire du pendule explorateur et des tables tournantes. 8vo. *Paris*, 1854

Chiaje. (*Vide* Delle Chiaje.)

† **Chigi, A.** Dell' Elettricità terrestre-atmosferica. . . 8vo. 170 and 1 pp. *Sienna*, 1777

Lettera ad un amico sopra il Fulmine caduta, 18 Aprile, 1777, nella spranga . . torre del Palazzo . . di Sienna. *Sienna*, 1844

Children, John George. (*Born May* 18, 1777, *at Ferox Hall, Tunbridge; died January* 1, 1852, *at Halstead Place, Kent.*)

† An account of some experiments, performed with a view to ascertain the most advantageous method of constructing a Voltaic apparatus, for the purposes of chemical research. (From *Phil. Trans.* 1809, pt. i) 8vo. 5 pp. (*Phil. Mag.* xxxiv. 26.) *London*, 1809

† Galvanic Battery, 20 pairs of copper and zinc plates, each 6 ft. and 2 ft. 8in., and experiments. 8vo. 2 pp. (*Phil. Mag.* xlii. 144.) *London*, 1813

Children—*continued.*

An account of some experiments with a large Voltaic Battery. 8vo. 7 pp. (*Phil. Mag.* xlvi. 409.) *London*, 1815

Chiminello, Vincenzo. (*Born June* 30, 1741, *at Marostica b. Vicenza; died February* 16, 1815, *at Marostica.*) Nephew and Assistant to Toaldo at the Padua Observatory, and his successor there. He continued the Giornale Astrometeorol. after Toaldo's death in 1797; in 1818, or before, it was continued by the Abbé Busata. Chiminello published 68 memoirs.

* Memoria sull' Igrometro che ottenne il premio dell' Acad. Teodoro-Palatina di Manheim. (*Giorn. Enciclop. di Vicenza*, 1783.) 1783

†* Apologia dell Igrometro dell' Autore in risposta al Saussure. (*Giorn. Enciclop. di Vicenza.*)

†* Risultati di osservazioni barometriche per li quali si determina un doppio flusso e reflusso cotidiano dell' atmosfera. 4to. 13 pp. 1 plate. 1 folding table. (*Saggi di Padova*, i. 195.) *Padova*, 1786

†* Ricerche sopra la causa piu efficace del doppio flusso e reflusso cotidiano dell' atmosfera, ed altre cause concomitanti di questo fenomeno. 4to. 31 pp. 1 plate. (*Saggi di Padova*, i. 208.) *Padova*, 1786

Relazione di una colonna di fuoco veduta a Ceneda per tre giorni consecutivi, speditagli dall . . Zava G. di Ceneda. 4to. (*Padova Accad. Saggi*, ii. p. 9.) *Padova*, 1789

† Relazione di tre Aurore Boreales singolari dell' Ottobre 1786. Letta all' Accademia di Padova addi 7 Dec. dello Stesso anno. 4to. 4 pp. (*Opuscoli Scelti*, in 4to, xv. 280.) *Milano*, 1792

† Relazione di un Arco luminoso osservato addi 5 Settembre, 1788, dal Chiminello. 4to. 4 pp. (*Mem. Soc. Ital.* vii. 153.) *Verona*, 1794

Avvertenze per l'uso pratico dell' Ago magnetico. (*Giornale Astro-Meteorologico*, 1801.) *Padova*, 1801

† Congetture sulla cagione delle diverse variazioni dell' ago magnetico dal Nord. Ricevute, 3 Decem. 1803. 4to. 10 pp. (*Mem. Soc. Ital.* ix. 193.) *Modena*, 1804

Relazione di un' Aurora-australe osservata ai 17 Marzo 1803. (*Giornali Astrometeorologico*, 1804.) *Padova*, 1804

Fenomeni del terremoto di Napoli dei 26 Luglio, 1805. (*Giornale Astrometeorologico*, 1806.) *Padova*, 1806

† Risposta . . . al commento . . . nel Giornale Astrometeorologico, 1806, del Sig. G. Scaguller. 12mo. 24 pp. (*On lightning conducters.*) *Venezia*, 1806

Precauzione d'applicare il secondo conduttore ovvero l'Emissario per preservare gli edifizii dai Fulmini. (*Giornale Astro-meteorologico*, 1806.) *Padova*, 1806

† Declinazione dell' ago magnetico in Padova negli anni 1806-7. 4to. 4 pp.) (*Nuova Scelta d' Opuscoli*, in 4to, ii. 217.) *Milano*, 1807

Biografia di. 8vo. (*Giorn. dell' Ital. Lettera De Rio*, serie 2, tom. xvii. p. 164.) *Padova*, 1818

† Della vita e degli studii dell' Abate Vincenzo Chiminello. Breve Memoria estesa dal Fra. Bertirossi-Busata, inserita nel tomo xviii. degli Atti della Soc. Ital. 4to. 16 pp. *Modena*, 1819

† Portrait by G. Prada dip., G. Bosa inc.

† **Chinale** e Compa. Paragrandine. Istruzione . . . 8vo. 25 pp. 1 plate. (*Estratti del Propagatore.*) *Torino*, 1828

Chiostri, L. Dell' influenza del suono sulla elettricità atmosferica. 8vo. 13 pp. 1 plate. *Lucca*

Chladni Ernst Florens Friedrich. *Born November* 30, 1756, *at Wittenberg; died April* 3, 1827, *at Breslau.*

Ueber den Ursprung der von Pallas, gefundenen . . . Eisenmassen, und über einige Naturerscheinungen. 4to. (*Volta's copy.*) *Riga*, 1794

Chladni—*continued.*

† Über entgegengesetze Elektricität einer Katze. 8vo. *Jena*, 1797.)
(*Voight's Mag.* i. 1797

Über den Meteorsteinen von Bitburg. 8vo. (*Schweigger's Journ.* xliii. 1825.) *Nurnberg*, 1825

† Nouveau catalogue des Chutes de Pierres, &c. 16mo. 29 pp. (*Edited by Arago, in Annuaire pour* 1826, *par le Bureau de Longitudes.*) *Paris*, 1825

Merkwürdige meteorische Erschein-bei Saarbrück. 8vo. (*Poggendorff's Annalen*, vii. 1826.) *Leipzig*, 1826

Verzeichniss gefallener Stein-und Eisenmassen, Feuerkugeln, etc. (*In Gilbert's Annalen, many volumes. In Poggendorff's Ann.* vols. ii. vi. and vii. *and in Kerstner's Archiven*, vol. iv.)

Über die sprungweise gehende Bewegung mancher Feuerkugeln. 8vo.

Neues Verzeichniss der herabgefallenen Stein und Eisenmassen in chronologischer Ordnung. (*Vide also French version*, 1825.)

† **Chladni, E. F., Steininger and Næggerath.** Further account of the great mass of native iron of Bitburg: with Dr. Chladni's observations. 8vo. 6 pp. ("*Schweigger's' Jl.* N.R. xvi. 385.") (*Phil. Mag. or Annals*, ii. 41.) *London*, 1827

† **Chladni, E. F. F. und Schreibers.** Über Feuer-Meteore und über die mit denselben herabgefallenen Massen, von E. F. F. Chladni, mit (p. 425) Anhang-Verzeichniss der Sammlung von Meteor-Massen, welche sich im k.k. Hof-Mineralien-Cabinette in Wien befindet vom Director von Schreibers. 8vo. 434 pp. *Wien*, 1819

Nebst Zehn Steindrucktafeln und deren Erklärung von C. von Schreibers. Fol. viii. and 92 pp. 10 plates. *Wien*, 1820

Chompré, Nicolas Maurice. *Born September* 23, 1750, *at Paris; died July* 24, 1825, *at Ivry-sur-Seine.*

† Account of an experiment made by the Galvanic Society of Paris, upon the formation of the Oxymuriatic Acid, and the separation of Soda from the Muriate of Soda, by means of the Pile of Volta. Communicated on the 15th of December, 1806, to the Galvanic Society of the French National Institute. 8vo. 7 pp. (*Phil. Mag.* xxviii. 59.) *London*, 1807

Chretien, L. Corso di osservazioni meterolog. nella Zona torrida . . . a bordo il Vesuvio nel 1843. 4to. *Napoli*, 1844

Christ, J. L. Von der merkwürdigen Witterung von der Entstehung des Nebels. (*Vide also p.* 482 "*Electric Mists.*") *Vienna*, 1783

† **Christie, S. H.** On the Magnetism of Iron arising from its rotation. Communicated April 20, 1825, by J. F. W. Herschell, Esq. Read May 12, 1825. 4to. 71 pp. 2 plates. (*Phil. Trans.* 1825.) *London*, 1825

Theory of the diurnal variation of the Magnetic Needle. 4to. 1827

On the mutual action of particles of Magnetic Bodies. 4to. 1827

† On the laws of the deviation of Magnetic Needles towards iron. Read June 5, 1828. 4to. 36 pp. (*Phil. Trans.* 1828, p. 325.) *London*, 1828

† On the Magnetic influence of the Solar rays. 4to. 18 pp. (*Phil. Trans.* 1828.) *London*, 1828

† Memoranda made during the appearance of the Aurora Borealis on the 18th of November, 1835. Read December 10, 1835. 4to. 4 pp. 2 plates lith. (*Phil. Trans. for* 1835.) *London*, 1835

† Experimental determination of the Laws of Magneto-electric Induction in different masses of the same metal, and of its intensity in different metals. 4to. 48 pp. 2 plates. (*Phil. Trans. for* 1833, p. 95.) *London*, 1832

Christie, S. H.—*continued.*

† On improvements in the instruments and methods employed in determining the direction and intensity of the Terrestrial Magnetic Force. 4to. 26 pp. (*Phil. Trans.* 1833.) *London*, 1833

On Magnetic attraction. 4to. (*From Lament's Handbook.*) *Cambridge*

† Discussion of the Magnetical Observations made by Capt. Back, R.N., during his late Arctic Expedition. 4to. 39 pp. (*Phil. Trans.* part ii. 1836.) *London*, 1836

† **Christie and Airy.** Report upon a letter addressed by M. le Baron de Humboldt to H.R.H. the President of the Royal Society, and communicated by H.R.H. to the Council, June 9, 1836. 8vo. *London*, 1836
(*Vide also* Foster Parry *and* Christie. *Vide also* Challis.)

† **Christophle**, C. Histoire de la Dorure et de l'Argenture électro-chimiques. 8vo. 446 pp. *Paris*, 1851

† **Christoffel**, E. O. Dissertatio de motu permanenti electricitatis in corporibus homogeneis. 4to. 62 pp. 1 plate. *Berolini*, 1856

† **Churchman**, J. Three letters to Cassini on the relations of Magnetism and the Aurora. (*American Museum, a periodical publication.*) *Philadelphia*, 1788

† An explanation of the Magnetic Atlas or Variation Chart hereunto annexed; projected on a plan entirely new. . . . 8vo. 4 pp. 2 tables. Chart (separate). *Philadelphia*, 1790

† The Magnetic Atlas or Variation Charts of the whole terraqueous globe; comprising a system of the variation and dip of the Needle, by which, the observations being truly made, the longitude may be ascertained. 4to. 80 pp. 3 charts, 2 coloured. *London*, 1794

† The Magnetic Atlas. . . . Fourth edition, with considerable additions. 4to. xviii. xxix. and 86 pp. 2 large charts and a small plate. *London*, 1804

Cicero. De Divin. I. xviii. A.U.C. 645. (*Lightning without audible Thunder.*)

Cigna, Giovanni Francesco. *Born July* 2, 1734, *at Mondovi; died July* 16, 1790, *at Turin.*

† De analogia Magnetismi et Electricitatis. 4to. 25 pp. (*Miscellanea . . . Taurinensia*, tom. i. p. 43.) *Taurini*, 1759

† De motibus electricis experimentum. 4to. 3 pp. (*Miscellanea Taurinensia.*) *Taurini, n.d.*

† De novis quibusdam experimentis electricis. 4to. 41 pp. (*Miscellanea Taurinensia, Mélanges . . . de la Soc. R. de Turin pour les Années* 1762-5, tom. iii. p. 31.) *Taurini*, 1766

† De electricitate. 4to. 12 pp. (*Miscell. Taurin.* tom. v. p. 97.) *Taurini*, 1773

Lettres à M. Priestley sur la découverte de l'Electrophore. 1775

Lettre à M. La Grange sur la découverte de l'Electrophore. 1775

"Alcune note per provare che l'Elettroforo del Volta non era altro che il suo apparecchio moltiplicatore dell' elettricità, stampato nel tomo iii. della Società R. di Torino." 4to. *Torino*, 1775

† Memorie istoriche intorno alla vita ed agli studi di Gianfrancesco Cigna de Antonmaria Vassalli Eandi. Letta 14 Ap., 1822. 4to. 24 pp. (*In Mem. di Torino*, xxvi. p. xiii.) *Torino*, 1821

Cigogna, E. A. Saggio di Bibliografia Veneziana. 8vo. *Venezia*, 1847

Cilano de Maternus, G. C. De causis lucis borealis, &c. *Altona*, 1743

† **Cima,** A. Saggio storico-critico e sperimentale su le contrazioni galvaniche, e su le correnti elettro-fisiologiche. 8vo. 143 pp. *Cagliari*, 1846

Ricerche intorno alcuni punti di Elettro-fisiologia. (*Mem. Accad. . . . Istituto de Bologna*, viii.) *Bologna*, 1858

Cimento. (*Vide* Accademia del Cimento.)

† **Ciniselli,** L. Sulla elettro-puntura nella cura degli Aneurismi . . . 4to. 78 pp. *Cremona*, 1856

† Nuovo apparato elettro-motore ad un solo liquido ed a corrente costante. 4to. 11 pp. (*Estratto dalla Gazzetta di Cremona del* 15 *Maggio*, 1858, No. xx.) *Cremona*, 1858

† **Cioni e Petrini.** Lettera all' O. Targioni Tozzetti sul Galvanismo. 8vo. 18mo. (*Ann. di Chim. di Brugnatelli*, xxii. 322.) *Pavia*, 1805

† Memoria sull' azione chimica dell' elettricità nella decomposizione dell' acqua. 8vo. 55 pp. *Firenze*, 1805

† Letter of Messrs. Cioni and Petrini to Professor Pacchiani, of Pisa, on the supposed production of Muriatic Acid by Galvanism. 8vo. 4 pp. (*Abridged from Ann. de Chim.* lvi. 269; *Phil. Mag.* xxiv. 167.) *London*, 1806

Cipri, G. (de Palerme.) Découvertes physico-mécaniques. 8vo. (*From C. I. R. Istit. Lomb.* xiii. 108, *in* 8vo. 1846.) *Paris*, 1846

Circaud. Recherches sur la contraction de la fibrine du sang, par l'action galvanique. 4to. (*J. de Phys. Brumaire*, an. xi. pp. 402 and 468.) *Paris*, 1803

Ciresara, G. B. Lettera al . . Pigato sopra la convulsione elettrica. 4to. *Vicenza*, 1748

Cito, M. (Principe della Rocca). Esperimenti su la forza elettromotrice delle varie sostanze: pubblicati in occasione della settima riunione degli Scienziati Italiani. 4to. *Napoli*, 1845

Risposta alla lettera intorno alla forza elettro-motrice voltaica del . . . G. Grimelli. 8vo. (*From G. I. R. Istit. Lomb.* xiii. 108, 8vo.) *Napoli*, 1845

Civetti, G. L'Elettricismo. Poemetto . . . *Parma*, 1771

Civil Engineer and Architects' Journal. 4to. *London*

Civil Engineers, Institution of. Proceedings. (*Papers on Submarine Telegraphy, &c., are entered under Authors' names.*)

Claire-Deville. (*Vide* Ste. Claire-Deville.)

† **Clanny,** W. R., M.D. Thunderstorm, account of, in letter to Tilloch, dated Hendon, July 7, 1808. 2 pp. (*Phil. Mag.* xxxi. 152.) *London*, 1808

† **Clark,** Dr. D. (*Vide* Austin and Clark.)

† **Clark,** Sir John. Part of a letter . . . to R. Gale. Dated November 6, 1731. (Odd impression made by Thunder on an Oak.) 4to. 2 pp. (*Phil. Trans.* xli. 325.) *London*, 1739-40-41

Clark, Latimer. *Born March* 10, 1822, *at Great Marlow, Bucks.*

† Experimental investigation of the laws which govern the propagation of the Electric current in long Submarine Cables. . . . Fol. 50 pp. 1 plate. (*Reprinted from Government Report on Submarine Cables*, 1861.) *London*, 1861

† On Electrical quantity and intensity. 8vo. 5 pp. (*Proc. Royal Inst. Great Brit.* 1861.) *London*, 1861

† On the Birmingham Wire Gauge. 8vo. 6 pp. and tables. (*Proc. Brit. Assn. for the Advancement of Science.*) *London*, 1867

† The Telegraphic Breviary, being a list of abbreviated Telegraphic addresses. 8vo. *London*, 1867

† Electrical tests of various recent submarine Telegraphic Cables (No. 2). Fol. 1 sheet, a table. *London*, 1868

Clark, Latimer—*continued.*

† An elementary treatise on Electrical Measurement for the use of Telegraphic Inspectors and Operators. 8vo. 176 pp. table. 1 plate, wood. *London*, 1868

† On the Birmingham Wire Gauge. 8vo. 11 pp. (*Proc. Brit. Assn. for the Advancement of Science.*) (*Reprinted.*) *London*, 1869

† Traité élémentaire de la Mesure électrique à l'usage des Inspecteurs et Agents des Télégraphes, traduit de l'Anglais. (*Imprimerie Nationale.*) 8vo. *Paris*, 1872

† On the Storms experienced by the Submarine Cable Expedition in the Persian Gulf, 1869. (*Journ. Met. Soc.*) *London*, 1873

† **Clark**, Latimer, and **Sabine**, Robert. Electrical Tables and Formulæ for the use of Telegraph Inspectors and Operators. 8vo. 285 pp. *London*, 1871

(*This work has been translated into Italian.*)

† **Clark**, W. New Compass. 8vo. 1 p. (*Phil. Mag.* lix. 467.) *London*, 1822

Clark, W. S. On Metallic Meteorites. An inaugural dissertation. 8vo. 79 pp. 3 plates litho. *Gottingen*, 1852

Clarke, D. K., Exhibited Machinery of 1862, a Cyclopædia of the Machinery represented at the International Exhibition. (*From Gilbert's Cat.* 1865.)

Clarke, E. M. Magneto-electric Machine. 8vo. (*London and Edinburgh Phil. Mag. October*, 1836, ix. 262.) *London*, 1836

Account of a series of experiments made with a large Magneto-electrical machine. 4to. (*Trans. and Proceed. London Elect. Soc.*) *London*, 1838

† **Clarke**, G. A treatise on the Magnetism of the Needle, &c. 8vo. 24 pp. *London*, 1818

† Essay on the cause of the Magnetism of the Needle, with the reason of its being North and South. . . . 8vo. 20 pp. *Southwark*, 1825

Clarke, H., and **Maskelyne**. On a plan for properly observing Fire-ball Meteors. 8vo. (*Tilloch's Phil. Mag.* ii. 130.) *London*, 1818

† **Clarus**, A. Geschichte des Galvanismus aus dem Französisch. von Sue, mit Anmerkungen und Zusätzen. Erste Theil. 8vo. 250 pp. *Leipzig*, 1802

† Geschichte des Galvanismus aus dem Französisch. von Sue, mit Anmerkungen und Zusätzen. Zweiter Theil. 8vo. 208 pp. (*Volta's copy.*) *Leipzig*, 1803

Clarus, J. C. A. Der Gewitter-Orkan, an. 8 Juli, 1819, und Einiges zur Naturgeschichte des Gewitters. 8vo. *Leipzig*, 1820

Claudian. Theod. Pulmanni craneburgii. Diligentia, et fide summa, è vetustis codicibus restitutus. 18mo. (*See poem, p.* 322, *Magnes.*) *Antverpiæ*, 1571

† **Clausius**, R. J. E. Die Lichterscheinungen der Atmosphäre. 8vo. 98 pp. 6 plates. (*Grunert's Beits. zur meteorol. Optik*, 4 *Hft.* 1850.) *Leipzig*, 1850

Anordnung der Elektricität auf sehrdünnen Platten und der beiden Belegungen der Franklin 'schen Tafel. 8vo. (*Poggend. Ann.* lxxxvi. 1852.) *Leipzig*, 1852

Mechan. Aequivalent elecktr. Entladung, &c. und dabei stattfindende Erwärm. des Leitdrahtes. (*Poggend. Ann.* lxxxvi. 1852.) *Leipzig*, 1852

Über die bei e. Leiter gethane Arbeit und erzeugte Wärme. 8vo. (*Poggend. Ann.* lxxxvii. 1852.) *Leipzig*, 1852

Uber die von Grove beobacht. Abhängigkeit des galvan Glühens von der Natur des umgebend Gases. (*Poggend. Ann.* lxxxvii. 1852.) *Leipzig*, 1852

Anwend. der mechan. Wärmetheorie auf thermoelektr. Erscheinungen. 8vo. (*Poggend. Ann.* xc. 1853.) *Leipzig*, 1853

Über die Natur des Ozon. 8vo. ("*Vorgetragen in der naturforsch Gesellsch zu Zürich den* 8 *März*, 1858.") 1858

Clebsch, A. Theorie der Elasticität fester Körper. 8vo. 424 pp. *Leipsig*, 1862

Clément-Mallet, J. J. Documents pour servir à l'Histoire de la Télégraphie électro-magnétique. 8vo. *Troyes*, 1850

Clerc. Compte-rendu. 1er Sémestre de 1819. 8vo. (*Lyon's Acad. Comptes-rendus.*) *Lyon*, 1819

(*Note.—Mention of a work received from le Comte de Lezai-Marnesia . . . sur les Paratonnerres et les Paragrêles*—n. d.)

† Clerget. Rapport . . . Sonneries . . . de M. Mirand. (*Vide* Mirand.)

† Close, D. Passage d'une lettre . . . sur les effets de la Foudre sur la chaîne du paratonnerre d'un vaisseau. 8vo. 2 pp. (*Toulouse Acad.* 4e série, tome iv. p. 483.) *Toulouse*, 1854

† Cochius, H. De luce electrica. Dissertatio inauguralis . . . 8vo. 66 pp. *Berol.* 1861

† Cochy-Moncan, A. Etude physiologique des Courants électriques. De l'influence des Courants électriques sur la circulation, et de quelques déductions thérapeutiques. 8vo. 112 pp. *Paris*, 1870

† Codazza, G. Sulle induzioni molecolari prodotte dalle ondulazioni longitudinali dell' etere. Mem. letta 25 Nov. 1852. 4to. 32 pp. (*Giorn. dell' I. R. Istit. Lombardo*, nuova serie, 4to. iv. 199.) *Milano*, 1852

† Sulla polarizzazione rotatoria della luce sotto l'influenza delle azioni elettro-magnetiche. Mem. Prima. 4to. 48 pp. (*Giornale dell' Istit. Lombardo*, nuova serie, iv. 491.) *Milano*, 1853

† Sulla polarizzazione rotatoria della luce sotto l'influenza delle azioni elettro-magnetiche. Mem. seconda. 4to. 44 pp. (*Giorn. dell' Istit. Lomb.* nuova serie, v. 299.) *Milano*, 1854

† Considerazioni sulla possibilità dell' esistenza di un mezzo magnetico negli spazii vuoti. . . . Letta 6 Dec., 1855. 4to. 15 pp. (*Giornale dell' I. R. Istit. Lombardo*, nuova serie, 4to. viii. 247.) *Milano*, 1856

† Sunto della prima parte. Sulle forze molecolari, &c. . . . Letta 5 Apr., 1860. 4to. (*Atti dell' I. R. Istit. Lombardo*, ii. 96.) *Milano*, 1860

Coeman. De acus magneticæ deviatione. 4to. (*From Watt.*) *Amsterdam*, 1668

Cohausen, Johann Heinrich. *Born* 1665, *at Hildesheim; died July* 13, 1730, *at Münster.*

† Lumen novum phosphoris accensum, sive exercitatio physico-chimica de causa lucis in Phosphoris . . . exarata. 8vo. 306 pp. 5 plates and frontispiece. *Amsterdam*, 1717

† Cohn, F. Ein interessanter Blitzschlag beschrieben. 4to. 2 plates. (*Acad. Leop.* 1856, vol. xxvi. part i. p. 177.) 1856

Die Einwirkung des Blitzes auf Bäume. 4to. (*Acad. Leop.* ?)

Colding, Ludwig August. *Born July* 13, 1815, *at Arnakke b. Holbeck, Seeland.*

† Om magnetens Indvirkning paa det blödt Jern. 17 pp. 2 plates. (*Vidensk. Selsk. Skr.*) *Kopenhaven*

Colepress, Samuel. Account of some Magnetical experiments. 4to. (*Phil. Trans.* 1667, p. 502.) *London*, 1667

Colla, Antonio. *Born about* 1806; *died March* 8, 1857, *at Parma.*

† Aurora boreale . . 18 Ottob. 1836. 8vo. 2 pp. (*Bibliot. Ital.* lxxxiii. 465.) *Milano*, 1836

† Fenomeni atmosferici. 8vo. 2 pp. (*Bibliot. Ital.* lxxxiii. 261.) *Milano*, 1836

† Aurora-boreale . . 18 Feb. 1837. 8vo. 3 pp. (*Bibliot. Ital.* lxxxvi. 429.) *Milano*, 1837

Notizia intorno ad agitazioni dell' ago magnetico osservate nel giorno 18 Aprile, 1842. 8vo. *Parma*, 1842

Colla, Antonio—*continued.*

† Notizie meteorologiche relative agli anni 1841 e 1842. 12mo. 32 pp. (*Stelle Cadenti*, p. 29; *Age Magnetico*, p. 23.) *Parma*, 1842

Giornale Astronomico . . . per l'anno 1841, con Appendice di notizie astronomiche e meteorologiche di A. Colla. Meteorologo della D. Università di Parma. *Parma*, 1841

Nota. Meteorologica, Aurora-boreale, Perturbazioni magnetiche, Bolide ed Areoliti. (*From Padua Acad. Nuovi Saggi.*)

Notizie meteorologiche relative agli anni 1841-2-3. 8vo. *Parma*, 1844

Colladon, Jean Daniel. *Born December 15, 1802, at Genf.*

On his Multiplier, and atmospherical electricity. (*From Arella.*)

† Collen, H. On the application of the photographic Camera to Meteorological Registration. 8vo. 3 pp. 1 plate. (*Phil. Magazine*, xxviii. 73.) *London*, 1846

Note.—Collen claims a share in my inventions unjustly.—F.R.

† Collette, J. M. Le télégraphe imprimeur Hughes. Manuel principalement à l'usage des employés du télégraphe. 8vo. 82 pp. 6 plates. *La Haye*, 1871

Collezione di Opuscoli Scientifici e letterari, ed estratti d'opere interessanti. 8vo. *Firenze*, 1807

Collina, Abbondio. *Born at Bologna; died December 21, 1753, at Bologna.*

† De acus nauticæ inventore. 4to. 11 pp. (*Comment. de Bonon. Scient. . . Instit.* tom. ii. part iii. p. 372.) *Bononiæ*, 1747

† Considerazioni istoriche sopra l'origine della Bussola nautica nell' Europa e nell' Asia. 4to. 145 pp. *Faenza*, 1748

Collinder. De fulguribus. 4to. (*From Watts.*) *Upsal*, 1686

† Colmet-d'Huart, De. Nouvelle théorie mathématique de la chaleur et de l'électricité. 1re partie. Détermination de la relation qui existe entre la chaleur rayonnante, la chaleur de conductibilité, et l'électricité. 8vo. 142 pp. 1 plate. *Luxembourg*, 1864

† Nouvelle théorie mathématique de la chaleur et de l'électricité. 2me partie. Théorie mathématique de la diathermansie, de la lumière et de la chaleur rayonnante naturelles et polarisées. Théorie mathématique de l'électricité statique en ayant égard aux découvertes des propriétés électriques des corps isolants faites par Faraday. 8vo. 148 pp. 3 plates (lith.) *Luxembourg*, 1865

Colquhoun, D. C. Inquiry into the origin of Animal Magnetism. 8vo. 2 vols. *London*, 1851

Columbus, Chris. "Entdecker der örtlichen Verschiedenheit d. magnet Declination, 1492, Sep. 13." (*From Pogg.* i. 467.)

† Combes. Rapport fait par M. Combes . . sur les appareils de télégraphie électrique de M. Regnault. 4to. 36 pp. 6 plates. (*Soc. d'Encouragement pour l'Industrie Nationale.*) *Paris*, 1855

† Comité des Fortifications, &c. Instruction sur les Paratonnerres . . suivie des Rapports . . à l'Institut et à l'Académie des Sciences. Fol. 39 pp. 1 plate. *Paris*, 1808

† Commentarii dell' Accademia di Scienze, Lettere, Agricultura, ed Arti del Dipartimento del Mella. 8vo.

Vol. iv. *for* 1811 *was printed in* 1812. *Brescia*, 1808

Commentarii dell' Ateneo di Brescia. 8vo. *Brescia*, 1814 *to* 1851

Commentarii de rebus in scientia naturali et medicina gestis. 37 vols. 8vo. *Lipsiæ*, 1752 *to* 1798

Decadis primæ, secundæ et tertiæ supplementum. 8vo. 15 parts. 6 vols. *Lipsiæ*, 1783 *to* 1793

Commissaires chargés par le Roi de l'éxamen du Magnétisme Animal. Rapport. 4to. 66 pp. *Paris*, 1784

Sir Francis Ronalds says the Commissioners were Franklin, Majault, Le Roy, Salin, Bailly, d'Arcet, Bailly, de Bory, Guillotin, Lavoisier. Borin died, and was replaced by Majault. Lavoisier was (probably) le Rapporteur, but Franklin is also quoted in that capacity.

Comparoni. Memoria sulla Elettricità animale, 1802. 8vo. (*Comment. dell' Accad. del Dipartimento del Mella*, vol. i.) *Brescia*, 1808

Compass Committee. *Vide* Liverpool Compass Committee.

Comus. (*Vide* Le Comus, Le Camus, and Ledru.)

Concato, L. Relazione sull' esito di varii casi di Colera trattati colla corrente elettro-magnetica. 8vo. *Padova*, 1855

† **Conceil,** J. A. Télégraphie nautique. 8vo. 2 plates. *Dunkerque*, 1852

Documents officiels sur les expériences de la Télégraphie nautique. 8vo. *Dunkerque, n.d.*

Concius, A. De succino. (*Pog.* i. 470.) 1660

Poggendorf refers in the same place to "Beschreib. über den ausser der Naturzeit. geschehenden Donnerschlag," without further indications.

Conférence maritime, tenue à Bruxelles pour l'adoption d'un système uniforme d'observations météorologiques à la mer. Août et Sep. 1853. 1853

† **Conférence Télégraphique internationale de Vienne.** Documents de la Conférence télégraphique internationale de Vienne. Fol. 459 pp. *Vienne*, 1868

Configliachi, Pietro. *Born* 1779, *at Mailand; died June* 27, 1844, *at Pavia.*

Sulla protesa analogia fra alcuni fenomeni fisici. 4to. 63 pp. Memorie di P. C. (*Giornale di Fisica* vi. 1813.) *Pavia*, 1813

This is a first Memoir only, no second was printed. It relates to Morichini's discovery.

Esperienze dirette a verificare la proprietà del raggio violetto annunziata dal Morichini di magnetizzare le punte di ferro. 4to. (*Originally a Memoir. Nel Giornale di Pavia*, vi. 291.) *Bologna*, 1813

† Traduzione, con note, di Häuy Pietre preziose. (*Vide* Häuy, iii. 261.) 8vo. (*Volta's Copy.*) *Milano*, 1819

Esperienze elettro-magnetiche. Mem. received on Jan. 4, 1821, by the Venetian-Lombardy Inst., not printed in its Mems. (*Vide* vol. iv. p. 7.)

Ulteriori ricerche sull' elettro-magnetismo. Mem. received on May 24, 1821, by the Venetian-Lombardy Inst., but not printed in its Mems. (*Vide* vol. iv. p. 7.)

D'una Meteora luminosa. Mem. received on June 27, 1822, by the Venetian-Lombardy Inst., but not printed in its Mems. *Vide* vol. iv. p. 7.

Sull' azione elettro-magnetica dei metalli. Mem. received on August 7, 1823, by the Venetian Lombardy Inst., but not printed in its Mems. *Vide* vol. iv. p. 7.

† Intorno alla costruzione dei Parafulmini. Memoria. (Ricevuta a di Feb. 3, 1830.) 4to. 12 pp. *Mem. Soc. Ital.* xx. 314, *Fisica.*) *Modena*, 1829

† Elogio scientifico del Volta. 8vo. 56 pp. Portrait. (*Vide* Volta.) *Como*, 1834

† Portrait. "Tratto da un disegno dal Garavaglia Cornienti del Litog. Vassalli. *Milano*

Short account of him. (No list of his works.) 8vo. 2 pp. *Milano*, 1845

(*Vide* also Brugnatelli and others.)

Configliachi, Luigi (?). Osservazioni sulle Pile a secco. Memoir received on March 12, 1818, by the Venetian Lombardy Inst., not printed in its Memoirs (*Vide* vol. iv. p. 5.)

Congrés de France. Sessions.

1. . . . . .
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6. Clermond Ferrand . . . . . 1839.
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8. . . . . .
9. Lyon. 2 vols. . . . . 1842.
10. . . . . .
11. . . . . .
12. . . . . .
13. . . . . .
14. . . . . .
15. . . . . .
16. Rennes. 2 vols. 8vo. . . . . 1849.
17. Nancy. 2 vols. 8vo. . . . . 1850.
18. . . . . .
19. . . . . .
20. . . . . .

† **Connel**, A. On the action of the Voltaic electricity on alcohol, ether, and aqueous solutions. 4to. 39 pp. 1 plate. (*Trans. Rl. Soc. of Edinburgh*, vol. xiii.) *Edinburgh*, 1835

† On the action of Voltaic electricity on pyroxilic spirit and solutions in water, alcohol, and ether. Read March 20, 1837. 4to. 27 pp. 1 plate. (*Trans. Rl. Soc. of Edinburgh*, vol. xiv.) (*Faraday's copy. Note by him at p.* 25.) *Edinburgh*, 1837

† On the Voltaic decomposition of water. 8vo. 3 pp. (*Phil. Mag.* vii. 4th Series, p. 426, June, 1854.) *London*, 1854

Consoni, T. Varietà elettro-magnetica-animale negli oggetti che si muovono e relativa spiegazione. 8vo. *Firenze*, 1853

Constrand, S. A. Om magnetnalens misvisning i Stockholm. (*Vet. Acad. Handl.* 1817.) 1817

Conté, N. J. Erfand . . einen verbesserten Telegraphen. (*From Pogg.* i. 173.)

† **Contessi**, Melandri. Disquisizione sui paragrandini. 4to. 26 pp. *Treviso*, 1826

† **Conti**. A. S. Riflessioni sull' Aurora boreale. 40 pp. 4to. *Venez.* 1739 (*This work is preceded by* 3 *pages* "*della Fata Morgana*," *by Angelucci.*)

Cooke, B. On the property of new Flannel sparkling in the dark. 4to. (*Phil. Trans.* 1747, p. 457.) *London*, 1747

† Part of two Letters from Cooke to Collinson concerning the sparkling of Flannel and the Hair of Animals in the dark. 4to. 5 pp. (*Phil. Trans.* xlv. 394.) *London*, 1748

† **Cooke**. Thomas Fothergill. Authorship of the practical Electric Telegraph of Great Britain; or, the Brunel Award vindicated, in seven Letters, containing extracts from the Arbitration Evidence of 1841, edited in assertion of his brother's rights. 8vo. *London*, 1868

† Invention of the Electric Telegraph. The charge against Sir Charles Wheatstone, of tampering with the press, as evinced by a letter of the Editor of the *Quarterly Review* in 1855, reprinted from the *Scientific Review*. 8vo. *London*, 1869

† **Cooke,** (afterwards Sir) **William Fothergill. Telegraphic Railways;** or, the Single way recommended by safety, economy, and efficiency, under the safeguard and control of the Electric Telegraph. 8vo. 39 pp. 4 plates or cuts. *London*, 1842

† The Electric Telegraph: was it invented by Professor Wheatstone? 8vo. 48 pp. *London*, 1854

† The Electrical Telegraph: was it invented by Professor Wheatstone? A Reply to Mr. Wheatstone's Answer. 8vo. 152 pp. *London*, 1856

† The Electric Telegraph: was it invented by Professor Wheatstone? Part ii. containing Arbitration Papers and Drawings. 8vo. 268 pp. 11 woodcuts on separate sheets. *London*, 1856

† The Electric Telegraph: was it invented by Professor Wheatstone? Part i. containing Pamphlets of 1854-6. 8vo. 282 pp. *London*, 1857

† The Electric Telegraph: was it invented by Professor Wheatstone? Third Thousand (or Edition). 8vo. 68 pp. (*Vide* also Hamel and Cooke.) *London*, 1866

Notification as to the Earth being able to replace the Return Wire (conductor). Read in 1843. (*Journ. Society of Arts*, 1843.) *London*, 1843

Cookson. John. Of an extraordinary effect of Lightning in communicating Magnetism 4to. (*Phil. Trans.* 1735.) *London*, 1735

Cooper. Experimental Magnetism. 8vo. (*From Young*, p. 436.) 1761

† **Cooper,** C. C. Identities of Light and Heat of Caloric and Electricity. 8vo. 96 pp. *Philadelphia*, 1848

Copenhagen Acad. Det Kongelige Norske Videnskabers selskabs Skrifter. 5 vols. 4to. *Kiobenhaven*, 1768-74

Nye Samling af det Kongelige Norske Vedenskabers selskabs Skrifter. *Kiobenhaven*, 1784

Det Kongelige Danske Videnskabens selskabs Skrifter. 6 vols. 4to. *Kiobenhaven*, 1801-18

Det Kongelige Danske Videnskabernes selskabs naturvidens kaberlige og mathematiske Afghandlinger. 2 vols. 4to. *Kiobenhaven*, 1824 & 1828

Note.—These Titles are selected from Muncke's Art Physik in Gehler's Worterbuch of 1833, tom. vii. 572. *The* dates *are not to be depended upon.*

Copenhagen Society. Acta Reg. Soc. Hafniensis. 4 vols. 8vo. *Hafn*, 1812

Nova Acta Reg. Soc. Hafniensis. 1 vol. 8vo. *Hafn*, 1819

† **Cornelius,** C. Erklärung der wichtigsten Erscheinungen der Elekt. unter Voraussetzung eines elektrischen Fluidums. 8vo. 79 pp. *Giessen*, 1846

† **Cornelius,** C. B. Zu Theorie der electromagnetischen Erscheinungen. 8vo. 17 pp. (*Zeitschrift für d. Gesammten Naturwissenschaften. Aug.* 1853, No. viii.) 1853

† Die Lehre von der Elektricität und dem Magnetismus. Versuch einer theorotischen Ableitung der gesammten magnetischen und elektrischen Erscheinungen. 8vo. 208 pp. *Leipsig*, 1855

Corner. (*Vide* Bona and Corner.)

Corniani, G. B. L'Aurora. Poemetto. 8vo. *Brescia*, 1779

Cornwall, Capt. A Table of Observations on the variations of the Compass in the Ethiopic Ocean, in the year 1721 and the beginning of the year 1722. 4to. (*Phil. Trans.* an. 1722, p. 53.) *London*, 1822

Cortambert. Sur le Galvanisme. 8vo. (*Mémoires de la Société Médicale d'émulation*, i. 232.) *Paris.*

Cortenovis, A. M. Dialoghi tre dell' elettricismo conosciuto dagli antichi; etc. (*Giorn. letterar. di Venezia*, 1790.) *Venezia*, 1790

Cortes, Martin. Breve compendio de la esfera y de la arte de Navigar. *Cadiz,* 1546

Note.— Wherein the hitherto frequently denied inequality of Magnetic declination at various places was recognised.

Cosmos, Le. Revue encyclopédique des progrès des Sciences. Rédigé par Moigno. 8vo. *Paris,* 1852

Cosnier, Maloet, Darcet, &c. Rapport sur les avantages reconnus de la nouvelle méthode d'administrer l'électricité dans les maladies nerveuses, etc. . . . par M. Ledru, connu sous le nom de Le Comus. 18mo. 116 pp. *Paris,* 1783

† **Cossa,** A. Notizie relative alla storia dell' Elettro-Chimica. 8vo. 17 pp. *Pavia,* 1858

Note.—Shows clearly Brugnatelli's priority in invention, and complete practical application of electro-plating, &c. p. 16.

Cossali, Pietro. *Born June 29th,* 1748, *at Verona; died December 20th,* 1815, *at Padua.*

Osservazione su di un fulmine accompagnato da strani fenomeni. (*Pogg.* i. 483.)

Soluzione generale del problema di determinare la capacità d'una botte circolare o concolare elettrica con i fondi uguali oppure disuguali. (*Pogg.* i. 483.)

† Sui barometri luminosi: con Appendice dimostrante nel Barometro una macchina elettrica singolare. Memoria. Ricevuta 22 Luglio, 1809. 4to. 28 pp. 1 plate. (*Mem. Soc. Ital.* xv. 76. part ii.) *Verona,* 1810

Sulla dipendenza dei movimenti del Barometro dall' elettricità si artificiale che naturale. (*Read on 20th July,* 1815, *in the Venetian-Lombardy I. R. Institution, but not printed in its Memoirs.*) 1815

Costa, M. A. Memorie sopra i mezzi di perfezionare la nostra conoscenza . . . dell' atmosfera, e descrizione di un istrumento . . . per osservazioni meteorologiche . . . 8vo. 50 pp. 1 plate. *Lucca,* 1839

† **Costa de Serda,** E. Essai d'un Réglement sur le service télégraphique en campagne. 8vo. 96 pp. *Paris,* 1866

† **Costantini,** G. A. (?) Difesa della . . Sentenzache i Fulmini discendono dalle nuvole . . . Riflessioni . . 4to. 184 and 12 pp. *Venezia,* 1749

† **Costanzia,** G. Nuova macchina elettrica. 4to. 2 pp. 1 plate. (*Opuscoli Scelti,* xii. 69.) *Milano,* 1789

† **Costard,** G. Part of a letter from Mr. G. Costard to Mr. T. Catlin, concerning a fiery Meteor seen in the air on July 14, 1745. 4to. 3 pp. (*Phil. Trans.* xliii. 522.) *London,* 1744-5

† **Cotes,** R. A description of the great Meteor which was seen on the 6th March, 171⅘ sent in a letter from . . . R. Cotes . . . to R. Danuye . . . 4to. 5 pp. 1 plate. (*Phil. Trans.* xxxi. for 1720-21.) *London,* 1723

Cotte, Louis. *Born October 20th,* 1740, *at Lyon; died October 4th,* 1815, *at Montmorency.*

† Traité de Météorologie. Reprinted. 4to. (*Acad. Paris.*) *Paris*

† Mémoires de Météorologie, suite. 4to. (*Acad. Paris. Reprinted.*) *Paris*

Observation sur des modifications de l'électricité des nuages, pendant un orage, et sur le trait de feu du tonnerre, qui partoit en même temps de la terre et du nuage. 4to. (*Mém. de Paris,* an. 1769, *Hist.* p. 19.) *Paris,* 1769

Observation que la neige, tombant d'une nuée orageuse, est, comme la pluie, un véritable conducteur de l'électricité. 4to. (*Mem. de Paris,* an. 1772, p. i. *Hist.* p. 16.) *Paris,* 1772

Table of 134 Auroræ observed at Montmorency in twelve years, 1768-79. *Paris,* 1783

Cotton, E. Of a considerable Loadstone digged out of the ground in Devonshire. 4to. (*Phil. Trans.* an. 1667, p. 423.) *London*, 1667

Cotugno, Domenico. *Born January* 29, 1736, *at Rivo, Naples; died October* 6, 1822, *at Naples.* (*Poggendorff*, i. 417.)

† Said to have received a violent shock on dissecting a Mouse. (*In Giornale Enciclop. di Bologna, foglio*, viii. 1786.) *Bologna*, 1786

Note.—This is stated in a letter of one page from Cotugno to Vivenzio, dated Napoli, 2 Ottobre, 1784, *appended to Vivenzio's Teoria e Pratica dell' Elett. Med. translated from Cavallo, p.* 157, 1784. *Volta did not believe the account. Sue, Hist. du Galv.* i. 1, *referring to the Journal Encyclopédique de Bologna, gives a somewhat different account from that of Vassalli, and from that of Cotugno's letter of October* 2, 1784, *to Vivenzio. Sue refers also to the Journal de Physique*, xli. 57, *on the subject.*

† **Couche.** Sur le télégraphe des trains de M. Bonelli, &c. . . . 8vo. 24 pp. (*Ext. Annales des Mines*, vol. vii.) *Paris*, 1856

† **Coudret**, J. F. Recherches médicales physiologiques sur l'Electricité animale . . . 8vo. 496 pp. and table. 3 plates. *Paris*, 1837

† **Coudriniere.** Osservazione sulla luce dell' acqua del mare. 12mo. 4 pp. (*Scelta d'Opuscoli*, 12mo. xiv. 107.) *Milano*, 1776

Coulomb, Charles Augustin. *Born June* 14, 1736, *at Angoulême; died August* 23, 1806, *at Paris.*

Résultats des différentes méthodes employées à donner aux barres d'acier, le plus haut degré de magnetisme. 4to. (*Mém. de l'Institut.* vi. 1806.) *Paris*, 1806

Recherches sur la meilleure manière de fabriquer les aiguilles aimantées. . . . 4to. (*Mém. de Matémat. et de Phys.* ix. 165.) *Paris*, 1777

† Recherches théoriques et expérimentales sur la force de torsion et sur l'élasticité des fils de métal. Application de cette théorie à l'emploi des métaux dans les arts et dans différentes expériences de physique. Construction de différentes balances de torsion pour mesurer les plus petits degrés de force. Observations sur les lois de l'élasticité et de la cohérence. 4to. 41 pp. 2 plates. (*Mém. de Paris*, an. 1784, *Mém.* p. 229.) *Paris*, 1784

Description d'une boussole, dont l'aiguille est suspendue par un fil de soie. 4to. (*In Mém. de Paris*, an. 1785, *Mém.* p. 560.) *Paris*, 1785

† Mémoires sur l'Electricité et le Magnétisme. Extraits des Mémoires de l'Acad. R. des Sciences de Paris, publiés dans les années 1785 à 1789, avec planches et tableaux. 4to. *Paris*, 1785-9

† Détermination théorique et expérimentale des forces qui ramènent différentes aiguilles aimantées à saturation, à leurs méridiens magnétiques. Lu le 26 prairial, an. vii. 4to. 1 plate. (*Mém. de l'Institut.* 1re. cl. tom. iii. p. 176.) *Paris*, 1799

† Nouvelle méthode de déterminer l'inclinaison d'une aiguille aimantée. 4to. 20 pp. (*Mém. de l'Instit. Nat.* tom. iv. *Sc. Math. et Phys. Mém.* p. 565.) *Paris*, 1799

Mém. sur l'Electricité et le Galvanisme. 4to. 1810

Experiments on the causes which determine a body to take one kind of Electricity rather than another. (*Biot's Physiq.* tom. ii.)

Mémoire sur le Magnétisme. 4to. (*Soc. Philomath.* an. 10, pp. 101, 114.) *Paris*, 1802

Nouveau moyen pour mesurer l'inclinaison de l'aiguille aimantée. 4to. (*Société Philomath.* an. 3, p. 53.) *Paris*, 1795

(*Note.—Arcila says that Biot had possession of Coulomb's MSS.*)

Coulvier-Gravier. Recherches sur les Météores. 8vo. 1850

† Catalogue des Globes filants observés de 1841 à 1853. 4to. 1 plate. *Paris*, 1854

† Note sur le retour des Etoiles filantes aux 9, 10, 11 Août. 4to. 4 pp. 1 plate. (*Ext. Ann. Chim.* 3 série, vol. xliii.) *Paris*, 1855

† Recherches sur les Météores et sur les lois qui les régissent. 8vo. 372 pp. 16 plates (lith.). *Paris*, 1859

† Suite du Catalogue des Globes filants (Bolides) observés à l'observatoire météorologique du Luxembourg du 3 Septembre, 1853, au 10 Novembre, 1859. 4to. 15 pp. (*Ext. des Ann. de Chim.* 3me série, 1860.) *Paris*, 1860

Précis des recherches sur les Météores et sur les lois qui les régissent. 12mo. 182 pp. 12 plates. *Paris*, 1863

† Les Etoiles filantes. 8vo. 14 pp. (*Extr. de la Revue Maritime et Coloniale*, Fév. 1864.) *Paris*, 1864

Précis des recherches sur les Météores et sur les lois qui les régissent. 12mo. 182 pp. 2 plates. *Paris*, 1866

Recherches sur les Météores et sur les lois qui les régissent. 8vo. 272 pp. 1 plate. (*From Zuchold's Cat.* 1866, p. 68.) *Paris*, 1866

† Lettres sur les Etoiles filantes. 12mo. 147 pp. *Paris*, 1866

† **Coulvier-Gravier et Saigey.** Recherches sur les Etoiles filantes. Introduction Historique. 4to. 192 pp. *Paris*, 1847

Courcelles, de. Dissertatio de electricitate, summo viscosam disobstruente materiam remedio. 4to. (*From Guitard and Holbeck*, p. 52.) 1756

Courtnay. (*Vide* Bache and Courtnay.)

† **Couvier**, George. Rapport sur le galvanisme fait à l'Institut national. 4to. 4 pp. (*Mém. des Sociétés Savantes et Littér.* i. 132, *and from Sue, Hist.* ii. 151, *and in Journ. de Phys.* vii. 318.) *Paris*, 1801

† **Cowper**, (Poet.) Letter to Tilloch, from J. S. S., containing an Extract from the 3rd vol. p. 178, in a letter to the Rev. John Newton, of Cowper's Correspondence as published by Hayley. This extract contains an account of two Fireballs which burst "*on the steeple, or close to it*," at Olney. 8vo. (*Phil. Mag.* xix. 296.) *London*, 1804

Coxe, Dr. J. R. Use of Galvanism as a Telegraph: in an extract of a Letter from Dr. J. Redman Coxe, Professor of Chemistry, Philadelphia. 8vo. (*From Vail*, p. 128, *in Thomson's Annals*, 1st series, vii. 162.) *London*, 1816

Cozzi, Andrea *Born about* 1795, *at Florence; died November* 27, 1856, *at Florence.*

† Sulle applicazioni della forza elettro-chimica della pila all' analisi dei sali metallici disciolti in liquidi organici vegeto-animali. Memoria. 8vo. 10 pp. (*From Pogg.*) *Firenze*, 1835

Storia dei più grandi progressi della Scienza elettrica. Discorso . . nel suo priv. Instituto. 8vo. *Firenze*, 1837

Sulle applicazioni della forza elettro-chimica . . all' analisi dei Sali. 8vo. 7 pp. *Firenze*, 1842

† **Cradock**, Z. The appearance of a fiery Meteor as seen by Cradock, communicated by M. H. Baker. (Read June 7, 1844.) 4to. 1 p. (*Phil. Trans.* xliii. 78.) *London*, 1744-5

† **Crahay**, J. G. Mémoire sur les Oscillations diurnes du Baromètre. 15 pp. 2 plates. 4to. *Bruxelles*, 1843

Sur l'emploi de le fonte de fer dans la confection d'aimans artificiels. (*Bulletin de Bruxelles Clas. des Sciences*, 1853, p. 406.) *Bruxelles*, 1853

† **Craig**, Wm. On the influence of the variations of Electric Tension as the remote cause of Epidemic and other Diseases. 8vo. 436 pp. *London*, 1859

Cramer, Johann Andreas. *Born December* 14, 1710, *at Quedlinburg; died December* 6, 1777, *at Berggiesshübel b. Dresden.*

Cramer, Joh. And. Elementa docimasticæ.

Anfangs gründe d. Probirkunst Neue Auflösung, von J. F. A. Gottling. *Leipsig*, 1794

Cramer, Joseph Anton. *Born February* 12, 1737, *at Paderborn; died December* 21, 1794, *at Hildesheim.*

Boricht von einer am 5 Nov. 1784, zu Hildersheim beobachteten feurigen Lufterscheinung. *Bremen*, 1785

† Über die Entstehung des Nordlichts. 8vo. 109 pp. *Bremen*, 1785

Cramer, Gabriel. *Born July* 31, 1704, *at Geneva; died January* 4, 1752, *at Bagnolo b. Nismes.*

† An account of an Aurora Borealis attended with unusual appearances, in a letter from the learned Cramer to Jurin J., dated Geneva, February 20, 1730, N.S. 4to. 4 pp. (*Phil. Trans.* xxxvi. 279.) *London*, 1729-30

† **Craufurd**, R. Stone from the clouds on the 5th April, 1804, at Possil, about three miles from Glasgow. 8vo. 4 pp. (*Phil. Mag.* xviii. 371.) *London*, 1804

Crause (Krause), R. W. De fulmine tactis. *Jenæ*, 1694

Crell, L. F. F. Chemisches Journal. 6 Bde. *Helmstadt*, 1778-81

Chem. Archiv. 2 Bde. *Helmstadt*, 1783

Neues Chem. Archiv. 8 Bde. *Helmstadt*, 1783-94

Neustes Chem. Archiv. 1 Bd. 8vo. *Helmstadt*, 1798

Chemische Annalen. 40 Bde. 8vo. *Helmstadt*, 1784—1803

Beiträge zu d. Chem. Ann. 6 Bde. 8vo. *Helmstadt*, 1785-99

Crescimbene, G. Pensieri sulla vitale elettromozione. 8vo. *Bologna*, 1838

Creve, Johann Caspar Ignaz Anton. *Born October* 28, 1769, *at Coblenz; died July* 7, 1853, *at Eltville, Nassau.*

Beiträge zu Galvanis Versuchen üb. d. Kräfte d. thierischen Elekt. auf d. Bewegung d. Muskeln. 8vo. 104 pp. *Frankfurt and Leipsig*, 1793

Phénomènes du Galvanisme. (*Sue*, i. 227, *says* "*Voyez les Mémoires de la Soc. med. d'émulation*, i. 236.") *Paris*

Von der thierischen Electricität. (*Schreiben der Berliner Gesells. Naturf. Freunde*, B. xi. p. 113.) *Berlin*, 1794

† Vom Metallreize, ein neu entdeckt untrügl Prüfungsmittel des wahren Todes. 8vo. 226 pp. 1 plate. *Leipsig*, 1796

Vorläufige Bekanntmachung der Natur des Metallreizes entdeckt von Prof. Creve. (*Salzburg med. chirurg. Zeitung*, i. 49, *July*, 1796.) *Salzburg*, 1796

De Galvanismi in praxi medica usu.

Sue gives an "*Extrait d'un rapport fait sur cet ouvrage à l'Ecole de Médecine de Paris,*" *par Hallé et Sue, le* 24 *prairial, an.* 11, . . *and refers to the Jl. de la Soc. de Méd.* in 8vo. xviii. 216.

† **Crimotel de Tolloy.** Electricité, Galvanisme, et Magnétisme appliqués aux maladies nerveuses, &c. 42 pp. 8vo. *Paris*, 1853

Crœse, G. De Fulmine. 4to. (*From Watts.*) *Amsterdam*, 1659

Croissant, à **Laval.** Machines électriques en papier. (*Vide* Du Moncel, "Exposé," 2nd edit. p. 399.)

† **Croker.** An account of a Meteor seen in the air in the Daytime, on Dec. 8, 1733. 4to. 2 pp. (*Phil. Trans.* xli. 186.) *London*, 1739-40-41

† **Croker**, T. H. Experimental Magnetism, or the truth of Mr. Mason's discoveries in that branch of Natural Philosophy. 8vo. 2 plates. *London*, 1761

*† **Crookes**, Wm. A Handbook of the Waxed Paper process in Photography. 8vo. 55 pp. (*Vide also* Samuelson and Crookes.) *London*, 1857

Cross. (*Vide* Singer and Cross.)

Crosse, Andrew. *Born June* 17, 1784, *at Broomfield; died July* 6, 1855, *at Broomfield.*

† Experiments in Voltaic Electricity. 8vo. 6 pp. (*Phil. Mag.* xlvi. 421.) *London*, 1815

† Memorials scientific and literary of And. Crosse the Electrician; edited by Mrs. Crosse. 8vo. 360 pp. *London*, 1857

Crova, A. Mémoire sur les lois de la force électro-motrice de polarisation. Propositions de chimie données par la Faculté des sciences de Montpellier. 4to. 45 pp. Pl. *Metz*, 1862

Cruger, P. Disputatio de motu magnetis. (*From Pogg.* i. 501.) *Leipsig*, 1615

† **Cruickshanks**, W. On Galvanic Electricity. 8vo. (*Nicholson's Journ.* iv.) *London*, 18—

† **Crusell**, G. Über den Galvanismus, als chemisches Heilmittel gegen örtliche Krankheiten. Mit 3 Zusätzen. 4 Hefte. 8vo. 158 pp. *St. Petersburg*, 1841-3

† **Cruwys** Samuel. A description of an Aurora Borealis seen on the 6th February, 1720-1, at Cruwys-Morehard, in Devonshire. 4to. 5 pp. (*Phil. Trans.* xxxi. for 1720-21, p. 186.) *London*, 1721

Csapo. (*Vide* Jedlcek and Csapo.)

Culley, R. S. A Handbook of practical Telegraphy. 8vo. *London*, 1863

A second Edition was published in 1867.
A third „ „ „ „ 1868.
A fourth „ „ „ „ 1870.
A fifth „ „ „ „ 1871.

On Printing Telegraphs. With Fac-similes and Explanation of Wheatstone's Automatic, Caselli's Pantelegraph, Bonelli's, and other systems. (*Popular Science Review*, No. xi., *April.*) *London*

Cumming, James. *Born October* 24, 1777, *at London; died* 1861.

† On the connexion of Galvanism and Magnetism. Read before the Cambridge Philosophical Society, April 2, 1821. 4to. 1 plate. *Cambridge*, 1822

† On the application of Magnetism as a measure of Electricity. 5 pp. 8vo. (*Phil. Mag.* lx. 253.) *London*, 1822

On the development of Electro-Magnetism by Heat. 4to. 2 plates. *Cambridge*, 1824

† On the relative Polarities of the Metals as developed by Heat. A paper read by him on April 28th, 1823, at the Cambridge Phil. Soc., and in its Proceedings for 1823. 8vo. 2 pp. *Edinburgh*, 1824

† Table of Thermo-Electrics. 8vo. 1 p. (*Edinb. Phil. Journal*, x. 185.) *Edinburgh*, 1824

† Manual of Electro-dynamics, chiefly from Demonferand, with notes and additions. 8vo. 291 pp. 7 plates. *Cambridge and London*, 1827

Cuneus, N. A reputed discoverer of the Leyden Phial.

Note.—Beyond the assertion of D'Alibard (pp. 30-32) *that Musschenbrock and Allaman, citizens of Leyden, communicated the experiment made by Cuneus to the Académie Royale des Sciences de Paris at the beginning of* 1746, *I can find no such communication in Rees or other authorities.*—F. R.

*† **Cunningham.** On the motions of the Earth, &c. &c. 281 pp. 8vo. *London*, 1834

† **Cuper.** La Réforme télégraphique et la loi du 27 Juin, 1861. 8vo. 73 pp. *Paris*, 1866

† **Curioni, G.** Ricerche analitiche sul Bolide caduto a Trenzano il 12 Nov. 1856. 4to. 8 pp. (*Atti dell' I. R. Istit. Lomb.* i. 398. *Letta* 24 *Luglio*, 1859.) *Milano*, 1858

Curtet. Lettre à Van Mons, sur quelques nouveaux phénomènes galvaniques. 8vo. (*Journ. du Van Mons, No.* vi. p. 272; *also in Journ. de Phys.* an. xi. 64.) *Bruxelles*, 1803

Curtis, P. Luigi Maria. De Saggio sull' Elettricità naturale diretto ad ispiegare i movimenti &c. de Vulcani. 8vo. 88 pp. *Napoli*, 1780

Curtius. (*Vide* Donkin Curtius.)

Custine, Comte de. Discours sur les propriétés de la Lumière, du Feu, et du Fluide électrique. 8vo. (*Mém. de la Soc. de Nancy*, ii. 60.) *Nancy*

Cuthbertson, John. *Born probably in England; living in* 1816.

Description et usage d'un condensateur d'électricité, et explication du mode d'agir du fluide électrique dans l'appareil de Volta. 8vo. (*Jour. de Chim. de Van Mons*, No. xii. p. 313.) *Bruxelles.*

Eigenschappen van de Elektriciteit. 8vo. 3 vols. *Amsterdam*, 1769, 1782, 1793

Vollständige Abhandlung der theorischen und praktischen Lehre . . . aus dem Englischen. Dritte mit Zusätzen des übersetzers (Gehlers des Jüngern), vermehrte Auflage. 3rd edition. 8vo. *Leipzig*, 1785

Abhandlung von der Elektricität . . . aus dem Holländischen. 8vo. *Leipzig*, 1786

† Beschreibung einer Elektrisirmaschine und einigen damit von T. R. Deiman und A. Paets von Troostwyk angestellten Versuchen. Aus dem Holländischen. 8vo. 110 pp. 2 plates. *Leipzig*, 1790

Abhandlung von der Electricität, &c., aus dem Holländischen. Fortsetzung. 8vo. *Leipzig*, 1796

Vollständige Abhandlung der Theorie und praktischen Lehre der Elektricität nebst einigen Versuchen; aus dem Englischen mit Anmerkungen und Zuschuss. 8vo. 2 vols. *Leipzig*, 1797

† Copy of a letter from Mr. Cuthbertson to Dr. Pearson, communicating an important and curious distinguishing property between the Galvanic and Electric fluids. 8vo. 1 p. (*Phil. Mag.* xviii. 358.) *London*, 1804

† On a Distinguishing Property between the Galvanic and Electric Fluids. 8vo. 3 pp. (*Phil. Mag.* xix. 83.) *London*, 1804

† On the Decomposition of Water by Galvanism. 8vo. 2 pp. (*Phil. Mag.* xxiv. 170.) *London*, 1806

† Practical Electricity and Galvanism. 1st edition. 8vo. 271 pp. 9 plates. *London*, 1807

† An account of a new method of increasing the charging capacity of coated Electrical Jars. Discovered by John Wingfield, Esq. 8vo. 4 pp. (*Phil. Mag.* xxxvi. 259.) *London*, 1810

† Practical Electricity and Galvanism. 2nd edition, with corrections and additions. 8vo. 9 plates. *London*, 1821

(*Vide* also Cavallo and Cuthbertson.)

Cuvier, G. L. C. (*Vide* Biot and Cuvier.)

Cuypers, C. Exposé d'une méthode par laquelle on rend les disques de verre . . . des machines électriques capables d'exciter l'électricité dans une atmosphère humide. . . . (p. 10). Manière de faire bons caissons . . . Description d'un électrophore perpétuel, &c. . . . 8vo. 38 pp.
La Haye, 1778

† **Cyclopædia**, The. (By Rees.) Notice concerning. 8vo. 7 pp. (*Phil. Mag.* lvi. 218.) *London*, 1820

† **Czermak**, J. N. Der electrische Doppelhebel. Eine Universal-Contact-Vorrichtung, zur exacten Markirung des Momente, in welchem eine beliebige Bewogung biginnt, oder ihre Richtung ändert. 8vo. 26 pp. 1 plate.
Leipsig, 1871

D.

† **Dachaur,** G. Ozon. Eine gedrängte Zusammenstellung bisher gewonnener Resultate. 8vo. 204 pp. *München*, 1864

* **Dagron.** Traité de photographie microscopique. 18mo. 36 pp. *Paris*, 1863.

Daguin. Traité de physique. *Paris*, 1858

D'Agut. MSS. Mémoire de la périodicité des Etoiles filantes. (*Actes Bordeaux Acad.*) *Bordeaux*, 1839

Dahl, F. Handbok i Galvansplastic för Kunstnärer, Industrie-Idkare och Wänner of Numismatiken. Efter egen Erfarenhet samt de nyaste och bästa utländska Köllar utarbetad. 4to. 180 pp. 3 plates. *Carlshamn*, 1852

Galvanoplastik. (From Zuchold, 1856, p. 209.)

† **Dakin,** G. Proposed improvements in the construction of the Cylinder Electrical Machine, and accompanying apparatus. 8vo. 6 pp. (*Phil. Mag. or Annals*, viii. 251.) *London*, 1830

Dakbijla ka Prakaran. An Explanation of the Electric Telegraph. 8vo. 96 pp. *Agra*, 1855

Dalance, (or D * * *). Traité de l'Aimant: divisé en deux parties; la première contenant les espériences, et la seconde les raisons que l'on peut rendre. Par M. D * * *. 12mo. 140 pp., and 33 other plates. (*Rare.*) *Amsterdam*, 1687

This work is criticised in the Acta Eruditorum, Aug. 1687, p. 424.

† Traité de l'Aimant. 4to. *Liege*, 1691

Dalberg, F. von. Meteorcultus der Alten. 8vo. (*Vide* Martin, p. 116.) *Heidelberg*, 1811

Über den Meteorcultus d. Alten vorzügl. in Bezug auf Steine, die vom Himmel gefallen; e. Beytr. zu Alterthumskunde. 8vo. *Heidelberg*, 1811

† **Dalibard.** Expériences et Observations sur l'Electricité faites . . . par Franklin. Trad. de l'Angloise. 1re edition. 12mo. 222 pp. 1 plate. *Paris*, 1752

† Expériences et Observations sur l'Electricité faites . . . par Franklin. Trad. de l'Anglois. Seconde edition, revue . . augmentée . . . avec notes . . . par Dalibard. 12mo. 2 vols. 1 plate. *Paris*, 1756

Mémoire, lu à l'Acad. Royale des Sciences, le 13 Mai, 1752. Expériences et Observations sur le Tonnerre relatives à celles de Philadelphie. (*From D'Alibard, Exp. and Obser. par Franklin*, ii. 67.)

This memoir does not appear to have been printed in the Memoirs of the Academy. Bouguer rendered an account of his and Delor's experiments to the Academy on the 19*th* (?). *Dalibard gives his memoir at length in the above* (vol. ii. p. 67 *et seq.*), *but says nothing about Delor's.*

† **D'Almeida,** J. C. Thèse, présentée à la Faculté des Sciences à Paris . . . Sur la décomposition, par la pile, des sels dissous dans l'eau, Soutenue le 12 Août, 1856. . . . 4to. *Paris*, 1856

Dal Negro Salvatore. *Born Nov.* 12, 1768, *at Venice; died March* 12, 1839, *at Padua.*

† Nuovo metodo di costruire macchine elettriche. . . . 4to. 112 pp. 1 plate. *Venezia*, 1799

Note.—Poggendorff (ii. 265) *says* 1801 *and Padova which is probably a mere reprint.*

† Dell' elettricismo idro-metallico, &c. *Opuscolo* i. 4to. 116 pp. 1 plate. *Padova*, 1802

Dal Negro Salvatore—*continued.*

† Dell elettricismo idro-metallico. *Opuscolo* ii. 4to. 84 pp. *Padova*, 1803

† Descrizione di un nuovo Elettrometro ed alcune esperienze relative alla carica della colonna voltiana. Presentata 14 Maggio, 1804. 4to. 12 pp. 1 plate. (*In Mem. Soc. Ital.* xi. 623.) *Modena*, 1804

† Nuovi esperimenti elettro-magnetici. Memoria (i.) estratta dal fascicolo 6 Nov. e Dec., 1831, degli *Annali* delle Scienz. del Regno Lombardo-Veneto. 4to. 16 pp. 1 plate. (*Not finished.*) *Padova*, 1831

† Nuove esperienze ed osservazioni elettro-magnetiche. Memoria (i.) Letta 21 Giug. e 10 Lug., 1831. 4to. 19 pp. 1 plate. (*Accad. di Padova Nuovi Sagg.* vol. iii. p. 353.) *Padova*, 1831

† (Lettera.) Al Sig. Dott. Amb. Fusinieri Direttore. . . . Padova il di 20 Aprile, 1832. Nuovi esperimenti relativi all' azione del magnetismo sulle spirali elettro dinamiche, e descrizione di una nuova batteria elettromotrice. 4to. 3 pp. (*Ann. del Reg. Lomb.-Veneto*, ii. 109.) *Padova*, 1832

† Nuove esperienze ed osservazioni elettro-magnetiche. Mem. ii. 4to. 16 pp. 1 plate. (*Inscritta nel bimestre* v. vol. ii. *degli Annali delle Scien. del Regno Lombardo-Veneto.*) *Padova*, 1832

† Esperimenti diretti a confermare le nuove proprietà degli elettromotori del Volta scoperte del . . Dal Negro. 4to. 11 pp. (*Annali delle Scienze del Regno Lombardo-Veneto, Bimestre* ii. vol. iii. 1833.) *Padova*, 1833

† Nuove proprietà degli elettromotori elementari scoperte dal Prof. Dal Negro. Presentate all' Accademia di Scienze . . . di Padova il 26 Marzo, 1833. 4to. 2 pp. (*Ann. del Reg. Lomb.-Veneto*, iii. 105.) *Padova*, 1833

† Seconda serie di esperimenti diretti a confermare maggiormente l'efficacia dei perimetri delle lamine metalliche costituenti gli elementi elettrici del Volta, scoperta dal . . . Dal Negro. 4to. 4 pp. (*Ann. delle Scienze del Reg. Lomb.-Veneto*, iii. 228.) *Padova*, 1833

† Nuova macchina elettro-magnetica, immaginata dall' Ab. Salv. Dal Negro. 4to. 14 pp. 1 plate. (*Annali delle Scienze del Regno Lombardo-Veneto*, 10 *Marzo*, 1834, tom. iv. 67 pp.) *Padova*, 1834

† Terza serie di esperimenti, che servono di fondamento ad un principio che rende ragione delle nuove proprietà degli Elettromotori del Volta. . . . 4to. 13 pp. (*Annali delle Sci. Reg. Lombardo-Veneto*, tom. iv. p. 324.) *Padova*, 1834

† Nuovi esperimenti sul magnetismo temporario. Memoria iii. . . . letta il di 25 Aprile, 1835, all' Accademia di Padova. 4to. 11 pp. (*Ann. delle Scienze del Reg. Lomb.-Veneto*, v. 165.) *Padova*, 1835

† Nuovi esperimenti che confermano l'influenza della reciproca distanza dei perimetri dei due metalli sull' efficacia degli elettro-motori. 4to. 8 pp. *Padova*, 1835

† Dinamo-magnetometro, immaginato dal Prof. Dal Negro. Memoria ricevuta 9 Marzo, 1837. 4to. 12 pp. 1 plate. (*Mem. Soc. Ital.* xxi. 323.) *Modena*, 1837

† Sopra le proprietà dei perimetri dei due metalli costituenti gli elementi Voltiani. Memoria letta all' Accademia di Padova li 26 Giugno, 1838. 4to. 13 pp. 1 plate. (*Nuovi Saggi . . . Accad. di Padova*, tom. iv. p. 389.) *Padova*, 1838

† Descrizione degli Arieti elettro-magnetici tanto semplici, quanto composti immaginati dal . . S. Dal Negro. 4to. 16 pp. 1 plate. (*Mem. estratta dagli Ann. . . del Reg. Lomb.-Veneto*, viii. *Bim.* i. *Gennajo. e Feb.* 1838.) *Padova*, 1838

† Portrait by F. de Martiis incise.

* Dalrymple, D. Meteorological, &c. observations on the Climate of Egypt. 8vo. *London*, 1861

Dalton, John. *Born September 5, 1766, at Eaglesfield, near Cockermouth, Cumberland; died July 27, 1844, at Manchester.*

† On the height of the Aurora Borealis above the surface of the earth, particularly one seen on the 29th of March, 1826. 8vo. 11 pp. (*Phil. Trans.* 1828, part ii.; *Phil. Mag.* or *Annals*, iv. 418.) *London*, 1828

*† Meteorological Observations and Essays, with Appendix. 2nd edition. 8vo. *Manchester*, 1834

Chemical Philosophy. 2 vols. 8vo. *London*, 1842

† Memoirs of the Life and scientific researches of, by W. C. Henry. 8vo. 249 pp. 3 plates and portrait. (*Cavendish Society.*) *London*, 1854

D'Amécourt. (*Vide* Ponton D'Amécourt.)

Da Murello, A. G. Dello svolgimento dell' elettricità nell' economia animale vegetale. Discorso accademico. 8vo. (*From Da Rio, Giornale.*) *Torino*, 1805

Dana, James Freeman. *Born September 23, 1793, at Amherst, New Hampshire, U.S.; died April, 1827, at New York.*

† New electrical Battery. 8vo. 1 p. (*Phil. Mag.* lv. 408, and *Silliman's Journal*, i. 1819.) *London*, 1820

† D** Angelstown? Nouvel éxamen des causes des Aurores boréales. 8vo. 30 pp. 1 plate. *Paris*, 1836

† **Daniell**, John Frederic. *Born March 12, 1790, at London; died March 13, 1845, at London.*

Meteorological Essays and Observations. 1st edit. 8vo. *London*, 1823

On a new Register-Pyrometer for measuring the expansions of solids, and determining the higher degrees of temperature upon the common Thermometric Scale. 8vo. 9, 12, and 8 pp. 1 plate. (*In Phil. Mag. or Annals*, x. 191, 268, 350.) *London*, 1831

† On Voltaic Combinations. In a letter addressed to Ml. Faraday. . . Read February 11, 1836. 4to. 18 pp. 2 plates. (*Phil. Trans. vol. for* 1836, p. 107.) *London*, 1836

† Further observations on Voltaic Combinations. Read April 6, 1837. 4to. 21 pp. 1 plate. (*Phil. Trans. for* 1837, pt. i.) (*Faraday's copy.*) *London*, 1837

† Fourth Letter on Voltaic Combinations, with reference to the mutual relations of the generating and conducting surfaces. Read January 25, 1838. 4to. 16 pp. 1 plate. (*Phil. Trans.* 1838, pt. i.) (*Faraday's copy.*) *London*, 1838

An Introduction to the study of Chemical Philosophy. 1st ed. 8vo. *London*, 1839 ?

† Fifth Letter on Voltaic Combinations, with some account of the effects of a large constant Battery; and on the Electrolysis of secondary compounds. Read May 30, 1839. 4to. 24 pp. (*Phil. Trans. for* 1839, pt. i. p. 89.) (*Faraday's copy.*) *London*, 1839

† On the Electrolysis of Secondary Compounds. In a letter addressed to Michael Faraday. . . Read June 13. 4to. 16 pp. (*Phil. Trans. for* 1839, p. 97.) *London*, 1839

† Second Letter on the Electrolysis of Secondary Compounds, addressed to Michael Faraday. . Read May 21. 4to. 16 pp. (*Phil. Trans. for* 1840.) *London*, 1840

† Sixth Letter on Voltaic Combinations. Read April 28, 1842. 4to. 19 pp. (*Phil. Trans. for* 1842, pt. ii.) (*Faraday's copy.*) *London*, 1842

† Applications of Electro-Magnetic Force. 8vo. 7 pp. (*Ext. from Daniell's Chem. Philosophy*, 1843.) (*Roget's copy.*) *London*, 1843

† An Introduction to the study of Chemical Philosophy. 2nd ed. 8vo. *London*, 1843

* Meteorological Essays and Observations. 3rd ed. 2 vols. 8vo. *London*, 1845

† **Daniell and Miller.** Additional researches on the Electrolysis of Secondary Compounds. 4to. 19 pp. (*Phil. Trans. for* 1844, pt. i. (*Faraday's copy.*) *London*, 1844

(*Vide* also Brunel and Daniell.)

* **Danti, Ignatius.** Anemographia. M. Enatii Dantis. 4to. 26 pp. *Bononiæ*, 1578

(*A vertical rod* (*with vane*) *carries* (*below*) *a horizontal toothed wheel which acts upon a vertical wheel on a spindle carrying an Index.*)

Danzig Society. Versuche und Abhandlungen der naturforsch Gesellschaft in Danzig. 4to. Plates. *Danzig u. Leipsig*, 1747 *to* 1756

Neue Sammlung von Versuchen u. s. w. 4to. *Dansig*, 1778

Neuere Schriften der naturforschenden Gesellschaft in Danzig. 4to. 2 vols. *Halle*, 1821-28

Daquin, Joseph. *Born* 1757, *at Chambéry; died July* 12, 1815, *at Chambéry.*

Essai météorologique . . par Toaldo. Nouv. Edn. augmentée. . . On y a joint tradn. franç. des Pronostiques d'Aratus. 4to. (*Trans. from 2nd Ed. of Toaldo Saggio. . . Alme. electy.* p. 265.) *Chambery*, 1784

† **D'Arbas.** Description d'un Météore singulière, qui parut aux lieux de Marliac, &c., le 13 Juin, 1787. 4to. (*Mém. de l'Acad. de Toulouse*, 1 Serie, tom. iv.) *Toulouse*, 1790

*† **Darcet.** Neue Erfindung metallene Gussabdrücke mit Gyps-Form zu machen. 8vo. 44 pp. 2 plates. *Tubingen*, 1806

Darcet, Jean (d'Arcet). Rapport sur l'Electricité dans les malades nerveuses. *Paris*, 1783

Mémoire sur l'art de dorer le bronze au moyen de l'amalgame d'or et mercure. *Paris*, 1830

Die Kunst d. Broncevergoldung. 8vo. 126 pp. 6 plates. *Frankfurt*, 1833

Darcet. (*Vide* Cosnier, &c.)

Da-Rio, Nicolò. *Born August* 15, 1755, *at Padua; died February* 13, 1845, *at Padua.*

Giornale della Italiana Letteratura. 66 vols. 8vo. (*Indices* in vols. xxxi. and lxi.) (*Published anonymously.*) *Padova*, 1802 *to* 1828

Darguier. (*Vide* Marcorelle and Darguier.)

Darling, J. Cyclopædia bibliographica. 8vo. *London*, 1854

Darling, Dr. (*Vide* Dods.)

Darondeau, B. Cours de régulation des Compas professé a l'Ecole du Génie Maritime.

† Notice sur les résultats des expériences relatives aux perturbations du compas à bord des navires en fer, faites par G. B. Airy . . à la demande du bureau de l'amirauté; traduite de l'anglais par M. B. Darondeau, ingén. hyd. de marine. 8vo. 27 pp. (*Annales Maritimes et Coloniales.*) "Rapport à S. E. le Ministre de la Marine sur une Mission accomplie en Angleterre pour étudier les questions relatives à la régulation des compas." *Paris*

Sur l'emploi du compas étalon et la courbe des déviations à bord des navires en fer et autres. 8vo. 40 pp. 2 plates. *Paris*

† **Darondeau et Chevalier.** Observations météorologiques et magnétiques faites pendant le voyage autour du monde sur la corvette la Bonite, commandé p. M. Vaillant. 4 tomes. 8vo. Pls. *Paris*, 1840-46

† In Voyage autour du monde . . sur la Bonite en 1836 et 1837 . . commandée par Vaillant. Partie physique. Observations Météorologiques. 2 vols. 8vo. 1 plate (in vol. i.) *Paris*, 1840-1

In Voyage autour du monde . . sur la Bonite en 1836 et 1837 . . commandée par Vaillant. Partie physique. Observations Magnétiques. 2 vols. 8vo. 4 plates. *Paris*, 1842-46

Daubencourt et De Santiot. Précis succinct des principaux phénomènes du galvanisme, suivi de la traduction d'un commentaire de J. Aldini, sur un mémoire de Galvani, ayant pour titre "Des forces de l'électricité dans le mouvement musculaire," et l'extrait d'un ouvrage de Vassalli Eandi ayant pour titre "Expériences et observations sur le fluide de l'électromoteur de Volta." 8vo. *Paris*, 1803

(*Vide also* Larcher, Daubencourt, Cassius *and others.*)

† **D'Arrest.** Om den magnetiske Declinations seculaire variation i Kjobenhaven. 8vo. 11 pp. *Kjobenhaven*, 1859

Daubeny, C. G. B. Introduction to the Atomic theory. 2nd Edition. 8vo. 1850

† **D'Aubuisson.** Official Report of a fall of Aërolites near Grenade. 8vo. 5 pp. (*Phil. Mag.* xliv. 100.) *London*, 1814

† **Dauriac,** P. La Télégraphie électrique, son histoire . . et ses applications en France, en Angleterre aux Etats-Unis, &c. . suivis d'un Guide de l'Expéditeur . . 8vo. 120 pp. *Paris*, 1864

Daven, Fulgenzio, or **Fulgenzio, Daven** (di Savoja.) "Una latin a dissert. della teoria e uso della elettricità." *Vienna*, 1762

(*Vide* Bauer, Fulgentius.)

† **D'Avezac.** Anciens témoignages historiques relatifs à la Boussole. 8vo. 11 pp. *Paris*, 1858

† Aperçus historiques sur la Boussole et ses applications à l'étude des phénomènes du Magnétisme terrestre. 8vo. 16 pp. (*Lue à la Soc. Géograph.* 20 *Avril*, 1860. *Ext. Bulln. Soc. de Géograph. Av. et Mai*, 1860.) *Paris*, 1860

David. Dissertation de l'identité du fluide nerveux et du fluide électrique. *Paris*, 1830

† Thèse . . . sur la théorie electro-chimique. 48 pp. 8vo. *Douai*, 1836

† **Davidson,** Robert. (*Vide* Forbes.) On Motive Power by Electro-Magnetism. 1840

* **Davies,** A. M. Meteoric Theory of Saturn's Rings. (*From the Athenæum, Dec.*) 1871

† **Davies,** E. An account of what happened from Thunder in Carmarthenshire; partly from the woman's mouth that suffered by it, partly from what was observed by others; communicated to the Royal Society by Eames J., as he received it in a letter from Davies E., dated Pencarreg, Saturday, Dec. 6, 1729-30. 4to. 5 pp. (*Phil. Trans.* xxxvi. 444.) *London*, 1729-30

† **Davies,** T. S. Geometrical investigations concerning the phenomena of Terrestrial Magnetism. Read Feb. 5th and 12th, 1835. 4to. 27 pp. (*Phil. Trans. for* 1835.) *London*, 1835

† Geometrical investigations concerning the phenomena of Terrestrial Magnetism. On the number of points at which a Magnetic Needle can take a position vertical to the Earth's surface. Read Feb. 4, 1836. 2nd series. 4to. 32 pp. 7 plates. (*Phil. Trans.* 1836.) *London*, 1836

† **Daviet de Foncenex,** F. Récit d'une foudre ascendante eclatée sur la tour du fanal de Villefranche. (*Bibliotecs oltramontana*, 1789.) 1789

† **Davis,** Dl. Book of the Telegraph. 8vo. 44 pp. Cuts. (*Preface dated* 1847; *the first edition was in* 1842.) *Boston, U.S.*, 1851

† A Manual of Magnetism. . . . 4th edition. 8vo. 322 pp. 2 plates. *Boston, U.S.* 1852

Davy, Edmund. Mentioned shortly Gilding and Silvering by Galvanism in 1830. From Martin, vol. ii. p. 16. (*Phil. Trans.* 1831.) 1831

Davy, Dr. John. *Born May* 24, 1791, *at Penzance.*

Some observations on Atmospheric Electricity. 4to. (*Trans. Royal Society of Edinburgh*, 1836.) *Edinburgh*, 1836

Davy, John. Experiments on the Torpedo. (*Phil. Trans.* 1832, 1834, *and* 1841.)

Davy, Sir Humphry, Bart. *Born Dec.* 17, 1778, *at Penzance, Cornwall; died May* 29, 1829, *at Geneva.*

An account of some Galvanic combinations, formed by the arrangement of single metallic plates and fluids, analogous to the new Galvanic apparatus of Mr. Volta. 4to. (*Phil. Trans.* 1801, p. 397.) *London*, 1801

† Outlines of a view of Galvanism. 8vo. 16 pp. (*Chiefly extracted from a course of lectures on the Galvanic phenomena, read at the . . . Royal Institute.*) (*Roget's copy.*) *London*, 1801

Sur l'Electricité développée par le contact de diverses substances. (*Société Philomath.* an. 10, p. 111.) *Paris*, 1802

Outlines of Lectures on Chemical Philosophy. 8vo. *London*, 1804

† The Bakerian Lecture on some chemical agencies of Electricity. 8vo. 16, 16 and 14 pp. (*Phil. Mag.* xxviii. pp. 3, 104, and 220.) *London*, 1807

† Nuove osservazioni sulla scomposizione degli Alcali. 4to. 5 pp. (*Nuova Scelta d'Opusc.* ii. p. 282. *Account by Ameretti.*) *Milano*, 1807

† Scoperte Galvaniche del Sig. Davy. Transunto del rapporto della Commissione del Galvanismo, letto all' Istit. 4 Gen. 1808. (*Read* 1808.) 4to. 11 pp. (*Nuova Scelta d'Opusc.* ii. 190.) *Milano*, 1807

† The Bakerian Lecture. On so ne new phenomena of chemical changes produced by Electricity, particularly the decomposition of the fixed Alkalis, and the exhibition of the new substances which constitute their bases; and on the general nature of Alkaline bodies. 8vo. 18, 12, and 9 pp. (*From Phil. Trans.* 1808. *Phil. Mag.* xxxii. pp. 1, 101, and 146.) *London*, 1808

† Description of a new Eudiometer, invented by H. Davy, for the combustion of oxygen and hydrogen gases, by R. Knight. 8vo. 1 page, 1 plate. (*Phil. Mag.* xxxi. 3.) *London*, 1808

† Experiments on the Alkalies, repeated on the 14th and 28th January, 1808, before the Askesian and Mineralogical Society. (*Phil. Mag.* xxix. 372.) 1808

† Electro-chemical researches on the decomposition of the Earths; with observations on the metals obtained from the Alkaline Earths, and on the amalgam procured from Ammonia. (*From Phil. Trans. for* 1808, part ii. *Phil. Mag.* xxxii. 193.) 8vo. 31 pp. *London*, 1808

† The Bakerian Lecture. An account of some new analytical researches for the nature of certain bodies, particularly the Alkalies, Phosphorus, Sulphur, Carbonaceous matter, and the Acids hitherto undecomposed; with some general observations on Chemical Theory. 8vo. 10 pp. (*Phil. Mag.* xxxiii. 479.) *London*, 1809

† Researches on the Oxymuriatic Acid, its nature and combinations; and on the elements of the Muriatic Acid. With some experiments on Sulphur and Phosphorus made in the Laboratory of the Royal Institution. 8vo. (*In Phil. Mag.* xxxvi. 352 and 404. *Phil. Trans. for* 1809, part ii.) *London*, 1810

† The Bakerian Lecture for 1809. On some new Electro-Chemical researches on various objects, particularly the metallic bodies from the Alkalies and Earths, and on some combinations of Hydrogen. 8vo. 13 pp. (*Phil. Mag.* xxxv. 401, xxxvi. 17 and 85. *Phil. Trans. for* 1810, part i.) *London*, 1810

† Elements of Chemical Philosophy. Part i. vol. i. 8vo. xvi. and 511 pp. 12 plates. (*Phil. Mag.* xl. 145.) (*Roget's copy.*) *London*, 1812

Elements of Agricultural Chemistry. 4to. (*Experiments on action of Electricity in Vegetation.*) *London*, 1813

† Elementi di filosofia chimica, . . tradotti dall' Inglese in Francese dal Van Mons e in Italiano dal Dr. G. . . . con Note dei Sig. Prof. L. V. Brugnatelli e P. Configliachi. Volume i. 8vo. 275 pp. (*Volta's copy.*) *Milano*, 1814

Davy, Sir Humphry, Bart.—*continued.*

† Elementi di filosofia chimica, tradotti sulla versione francese fatta dal Van Mons, e comentati da G. Moretti e G. Primo. 2 volumi. 8vo. 1 vol. 410 pp. 4 plates; 2nd vol. 391 pp. 8 plates. (*Volta's copy.*) *Milano*, 1814

Elemente d. chemischen Theils d. Naturwissenschaft, aus d. Engl. von Fried. Wolf. 1r bd. 1ste Abtheil. 8vo. *Berlin*, 1814

† Elementi di filosofia chimica tradotti dall' Inglese in Francese dal Van Mons e in Italiano, dal Dr. G.; . . . con Note dei Sig. Prof. L. V. Brugnatelli e P. Configliachi. Volume ii. 8vo. *Pavia*, 1816

(*This volume contains* (*at the end*) *Davy's Introduzione alla filosofia chimica contenente la storio della chimica aggiunta all' edizione Pavese in due volumi*). (*Volta's copy.*) *Pavia*, 1816

Beiträge zur Erweiterung des Chemischen Theils der Naturlehre. Aus dem Englischen übersetzt. 8vo. *Berlin*, 1820

† On the Magnetic phenomena produced by Electricity. . . . 8vo. 8 pp. (*Phil. Trans. for* 1821, part i. *Phil. Mag.* lviii. 43.) *London*, 1821

† Further researches on the Magnetic phenomena produced by Electricity, with some new experiments on the properties of electrified bodies in their relations to conducting powers and temperature. 8vo. 10 pp. (*Phil. Mag.* lviii. 406.) *London*, 1821

† On the Electrical phenomena exhibited *in vacuo*. 8vo. 8 pp. (*Phil. Trans. for* 1822, pt. i. *Phil. Mag.* lx. 179.) *London*, 1822

† Preservation from Lightning. (*Portable conductor.*) 8vo. 1 p. (*Phil. Mag.* lix. 468.) *London*, 1822

† The Bakerian Lecture. On the relations of Electrical and Chemical changes. 1827. 8, 11, and 10 pp. (*Phil. Mag. or Annals*, i. pp. 31, 94, and 190.) *London*, 1827

† Six Discourses delivered before the Royal Society at their anniversary meetings on the award of the Royal and Copley Medals, preceded by an Address to the Society on the progress and prospects of Science. 4to. *London*, 1827

† Account of some Experiments on the Torpedo. 8vo. 4 pp. (*Phil. Trans. for* 1829, part i. *Phil. Mag. or Annals.* vi. 81.) *London*, 1829

† Life of Sir Humphry Davy . . . by John Ayrton Paris. (*Phil. Mag. or Annals*, x. 214, 379, 426.) *London*, 1831

Note.—This is a review of Paris's book.

Memoirs of, by John Davy. 8vo. 2 vols. *London*, 1836

† Works edited by John Davy. 8vo. 9 vols. *London*, 1839-40

Fragmentary Remains, Literary and Scientific, with a Sketch of his Life, edited by his Brother. 8vo. 1858

Davy. (*Vide* Marié-Davy.)

Debbe, C. W. Die Influenz-Elektrisirmaschine von Holz. (Programm d. Realsch. zu Bremen.) 4to. 7 pp. *Bremen*, 1870

De Boismont. (*Vide* Brierre de Boismont.)

De Bougainville. (*Vide* Bougainville.)

De Boillon. (*Vide* Boillon.)

Debout. Bulletin général de thérapeutique. (*From Guitard.*) *Paris*, 1852

De Branville. (*Vide* Branville.)

De Bremond. (*Vide* Bremond.)

† **Debrun**, L. P. Mémoire sur les Trombes qui ont paru au-dessus de Paris, le 16 Mai, 1806, adressé à l'Institut. 8vo. 28 pp. *Paris*, 1807

De Bruno. (*Vide* Bruno.)

De Caraman. (*Vide* Caraman.)

De Castro. (*Vide* Castro.)

Dechales, C. F. M. Mundus mathematicus. 4 vols. fol. 2nd edition. (*From Van Swinden*, i. 38, *and from Poggendorf.*) *Lyons*, 1690

† **Decharme,** M. C. Météorologie. Note sur les éclairs phosphorescents observés à Angers, le 25 Juillet, 1869. 8vo. 6 pp.) *Angers*, 1870

† **Decharmes,** C. Visites à l'Exposition Universelle. Electricité. 8vo. 15 pp. (*Extrait de la Picardie ; Revue littéraire et scientifique.*) *Amiens*, 1856

† Météorologie. De l'Ozone. Lu à l'Académie d'Amiens, 15 Décembre, 1855. 8vo. 12 pp. (*Extrait de la Picardie ; Revue littéraire et scientifique.*) *Amiens*, 1856

† Application de la lumière électrique à la Microscopie. 8vo. 7 pp. *Amiens.*

† Météorologie. Application du Télégraphe électrique à la prédiction du temps. 8vo. 6 pp. *Amiens*, 1856

† Nouvelle pile électrique. Nouvelles hélices, etc. . . . 8vo. 9 pp. *Amiens*, 1856

De Colnet. (*Vide* Colnet.)

De Curtis. (*Vide* Curtis.)

De Custine. (*Vide* Custine.)

De Dree. (*Vide* Dree.)

De. *Note.—All names having the prefix* De *will be found under the first letter of the second portion of the name, as above.*

De Foncenex. (*Vide* Darrot de Foncenex.)

De Gassicourt. (*Vide* Cadet de Gassicourt.)

Degaulle (or Degault), Jean Baptiste. *Born July 5, 1732, at Attigny, France; died April 13, 1810, at Honfleur, France.*

Description et usage d'un nouveau compas azimutal. *Havre*, 1779

Instruction sur la manière de vérifier les boussoles. (*From Poggendorff*, i. 535.) *Honfleur*, 1803

Deimann, J. R. Geneeskundige proeven en beschouwingen over de gunstige werking der electriciteit in verschellende ongestoladeden. (*From Poggendorff*, i. 1555.) *Amsterdam*, 1779

Von den guten Wirkungen der Elektricität auf verschiedene Krankheiten mit Zusätzen &c. von Kuhn. 2 vols. 8vo. (*From Dove*, p. 243.) *Kopenhagen*, 1793

Note.—The 2nd part or vol. consists entirely of Kuhn's additions to the Dutch original.

Versuche, welche die Zerlegung des Wassers durch die elektrischen-Funken näher bestätigen. 8vo. 1796

Deiman mit **Paets van Troostwijk.** Beschryving van eine electrisir-machine en van proefnemingen mit dezelve. 4to. *Amsterdam*, 1790

(*Vide* also Troostwijk.)

De la Borde. (*Vide* La Borde.)

De la Fond. (*Vide* Sigaud de la Fond.)

De la Garde. (*Vide* La Garde.)

De la Hire. (*Vide* La Hire.)

† **Delalande,** J. On the Stones said to have fallen from the Atmosphere. 8vo. 3 pp. (*Phil. Mag.* xvii. 228.) *London*, 1803

† **Delalot-Sevin.** Systèmes Delalot-Sevin pour l'éclairage et le chauffage par l'électricité à l'aide du photogène et du thermogène. 8vo. 39 pp. 4 plates. *Besançon*, 18C[illegible]

† **Delamarche, A.** Eléments de télégraphie sous-marine. 8vo. 83 pp. *Paris*, 1858

† Elemente der unterseeischen Telegraphie nach dem französischen frei bearbitet . . . mit Anmerkungen, &c. . . . Von C. Veichelmann. 8vo. 108 pp. 1 plate. *Berlin*, 1859

De la Métherie. (*Vide* La Métherie.)

De la Motte. (*Vide* La Motte.)

Delaroche. (*Vide* Brewer and Delaroche.)

De la Rive. (*Vide* La Rive.)

De la Rue. (*Vide* La Rue.)

De la Salle. (*Vide* La Salle.)

Delaunay, Louis. *Born* 1740, *in the Netherlands; died* 1805 (*about*), *at Vienna.* (*Poggendorff*, i. 540.)

Lettre sur la Tourmaline. 4to. 1782

Minéralogie des Anciens. 2 vols. 8vo. (*From Poggendorff*, ii. 540.) *Bruxelles*, 1803

† **Delaunay, Veau.** Letter of M. Veau Delaunay, M.D., to M. Delamétherie, upon the production of the Muriatic Acid by means of Galvanism. 8vo. 2 pp. (*Phil. Mag.* xxvii. 260.) *London*, 1807

Manuel de l'électricité. 8vo. 270 pp. 13 plates. *Paris*, 1809

Delaval, E. H. Electrical Experiments and Observations. 4to. (*Phil. Trans.* 1739.) *London*, 1739

An account of the effects of Lightning, &c. 4to. (*Phil. Trans.* 1764.) *London*, 1764

† **Delesse, A.** Sur le pouvoir magnétique des minéraux et des roches. 8vo. 59 pp. (*Annales des Mines*, xiv. 81.) *Paris*, 1849

† Sur le pouvoir magnétique des Roches (suite). 8vo. 25 pp. (*Ext. du* tom. xv. 4 série, *des Annales des Mines*, 1849.) *Paris*, 1849

† **Delezenne, M.** Notes sur la polarisation. 8vo. 300 pp. 5 plates. *Lille*, 1835

*† Notes sur la Polarisation. 8vo. *Lille*, 1835

† Notions élémentaires sur les phénomènes d'induction. 8vo. 132 pp. 2 plates. (*Ext. de la Soc. R. de Lille. Mém. Séance du* 20 *Déc.* 1844.) *Lille*, 1845

† Additions aux notions élémentaires sur les phénomènes d'induction. 8vo. 153 pp. 2 plates. *Lille*, 1848

† Expériences sur les Piles sèches. 8vo. 24 pp. (*Ext. des Mém. de la Soc. R. des Sciences . . . de Lille.*) *Lille*

Sur la constitution et la suspension des nuages. (*From Gauthier-Villars Cat. Juin*, 1855.)

Delille. Nouvel examen de la Phosphorescence de l'Agarie et de l'Olivier. (*Bulletin de la Soc. d'Agricult. de l'Hérault, Fév.* 1837.) *Montpellier*, 1837

Phosphorescence des Plantes. 8vo. *Montpellier*

Delius, Heinrich Friedrich von. *Born July* 8, 1720, *at Wernigerode; died October* 22, 1791, *at Erlangen.*

Gedanken von der anziehenden elektrischen Kraft. *Wernigerode*, 1744

Della Bella, Giovannantonio. *Born August* 30, 1730, *at Padua; died November* 24, 1823, *at Padua.* (*Poggendorff*, i. 139.)

Trattato sopra l'utilità dei conduttori elettrici. (*Pogg.* i. 139.)

Noticias historicas, e praticas à circa do modo de defender os edificios dos ontrages dos raios. 8vo. *Lisboa*, 1773

Memoria i. ii. sobre a força magnetica. 4to. (*Mem. da Acad. Real das Sc. de Lisboa*, t., i. 35 and 116 pp.) *Lisboa*, 1780

Note.—Lamont, Handbook, p. 427, *says Della Bella discovered the law of magnetic attraction and repulsion before Coulomb.*

Della Casa, L. Considerazioni sulla elettricità atmosferica, ciel sereno; e sopra alcuni fenomeni che ne dipendono. Memoria . . . estratta dal vol. v. delle Mem. dell' Acad. delle Scienze dell' Istituto di Bologna. 4to. *Bologna*, 1854

Sulla causa delle Correnti indotte nei circuiti metallici. (*Mem. dell' Accad. delle Scienze dell' Istituto di Bologna*, vol. vii. 1857-58.) *Bologna*, 1857-58

Della Pausa elettrica. (*Accad. delle Scienze dell' Istit. di Bologna*, p. 71, an. 1858.) *Bologna*, 1858

Neue Methode, die meteorologischen Instrumente graphisch. zu machen. (*Mem. Accad. dell' Scienze dell' Istit. di Bologna*, vol. ix. 1858.) *Bologna*, 1858

† **Dell' Acqua, C.** Sul modo di ben servirsi dell' apparato elettro-magnetico di Wolff perfezionato dal fisico-macchinista C. Dell' Acqua. 8vo. 12 pp. *Milano*, 1857

† Norme pratiche per ben costruire ed applicare i Parafulmini. 4to. 37 pp. 1 plate (lith.) *Milano*, 1859

Della Torre. (*Vide* Torre, G. M. Della.)

Delle Chiaje. On the organs of the Torpodo. (*From Matteucci et Savi.*)

Dellmann, Friedrich. *Born* 1805.

† Abhandlung: Uber ein neues Elektrometer. 4to. 24 pp. *Coblenz*, 1842

† Über die Gesetzmässigkeit und die Theorie des Elektricitäts-Verlustes. 4to. 28 pp. *Kreuznach*, 1864

† Über Luft Elektricität, Nebel, und Höhenrauch &c. 8vo. 20 pp. *Kreuznach*, 1870

† **Del Muscio, G.** Dissertazione con cui si risponde a varj dubbj promossi contro la teoria dell' elettricismo del Franklin dal . . . Poli nelle sue "Riflessioni intorno agli effetti di alcuni fulmini. 8vo. 66 pp. *Napoli*, 1774

Delor. (*Vide* Dalibard.)

Demarco, S. Il fluido elettrico applicato a spiegare i fenomeni della natura. *Ancona*, 1771

De Martino. (*Vide* Calamai &c.)

Demonferrand, Jean Baptiste Firmin. *Born* 1795; *died Jan.* 22, 1844, *at Paris.*

† Manuel de l'électricité dynamique, ou traité sur l'action mutuelle des conducteurs électriques et des aimants. 8vo. 210 pp. 5 plates. *Paris*, 1823

† Trattato d'Elettricità dinamica, ossia dell' azione delle correnti elettriche tra loro e sopra le calamite, &c. . . . opera . . . tradotta, per la prima volta, dal Silv. Gherardi, con Note ed Aggiunte. 8vo. 244 pp. 6 plates. *Bologna*, 1824

† Handbuch der dynamischen Elektricität. . . Bearbeitet von M. G. T. Fechner. 8vo. 220 pp. 5 plates. *Leipzig*, 1824

(*Vide* also Ampère.)

† **Demonville.** Mémoire explicatif des phénomènes de l'aiguille aimantée, pour faire suite à la question de longitude, etc. 8vo. 48 pp. 2 plates. *Paris*, 1833

Dempp, K. W. Vollstandiger Unterricht in der Tecnik Blitzableitersetzung, nach 66 Modellen. 8vo. *Munchen*, 1842

Dempster, G. An account of the Magnetic Mountains of Cannay, an island of ten or twelve miles. (*Trans. Soc. Antiquaries of Scotland*, i.)

Denys, G. L'art de naviguer perfectionnée par la connaissance de la variation de l'aimant, ou Traité de la variation de l'aiguille aimantée. (*From Poggendorff*, i. 550.) *Dieppe*, 1666

† **Denza, Franc.** Le aurore polari del 1869, ed i fenomeni cosmici che le accompagnarono. Memoria. 8vo. 42 pp. *Torino*, 1869

Denza, Franc.—*continued.*

† Aurore boreale et autres phénomènes météorologiques observés en Piémont, le 3 janvier, 1870. 8vo. 7 pp. *Torino*, 1870

† Norme per osservazioni delle meteore luminose; con in fine il modulo pel registro delle stelle cadenti. 8vo. 29 pp. *Torino*, 1870

Deratte. (*Vide* Roucher Deratte (or De Ratte).

Deregis, G. Sopra gli istrumenti di osservazione ad indicazione continua. *Novara*, 1852

† Derham, W. An account of some Magnetical experiments and observations. 4to. (*Phil. Trans.* xxiv. for 1704-5, pp. 2136 and 2138.) *London*, 1706

† Extract of several letters from different parts of Europe, relating to the Aurora Borealis seen Oct. 19, N.S. 1726. 4to. 4 pp. (*Phil. Trans. for* 1728, p. 453.) *London*, 1728

† Of the Meteor called the Ignis Fatuus, from observations made in England by Derham and others in Italy, communicated by Sir Thomas Derham, Bart., 4to. 11 pp. (*Phil. Trans.* xxxvi. 204.) *London*, 1729-30

† A letter to Sir Hans Sloane containing a description of some uncommon appearances observed in an Aurora Borealis by Derham. 4to. 2 pp. (*Phil. Trans.* xxxvi. 137.) *London*, 1729-30

† Dering, G. E. Improvements in the Electric Telegraph. 8vo. 11 pp. 1 plate. (*Specification of Patent, &c.*) *London*, 1850-1

De Rochas. (*Vide* Breton and De Rochas.)

Desaguliers, Jean Théophile. *Born March* 12, 1683, *at La Rochelle; died February* 29, 1744, *at London.*

Course of Experimental Philosophy. 4to. 1 vol. (*From Krunis*, p. 34. *Watt*, p. 299.) 1725

There are many editions. The edition of 1719 *contains no electricity. The first edition of his own seems to be that of* 1725; *2nd*, 1727; *3rd*, 1734; *4th*, 1745; *5th*, 1763. (*Vide Watt.*) *There is a French version of* 1763 *in* 4*to.*

An attempt to solve the phenomena of the rise of Vapours, formation of Clouds, and descent of Rain. 4to. (*Phil. Trans.* an. 1729, p. 6.) *London*, 1729

An account of some Magnetical experiments. 4to. (*From Reuss, Repert.* iv. 375. In *Phil. Trans.* 1738, p. 385.) *London*, 1738

† Some thoughts and experiments concerning Electricity. 4to. 8 pp. (*Phil. Trans.* xli. 186.) *London*, 1739-40-41

† Experiments made before the Royal Society, Feb. 2, 1737-8, by J. T. D., and Feb. 9 and Feb. 16. 4to. 7 pp. (*Phil. Trans.* xli. 193.) *London*, 1739-40-41

† An account of some Electrical experiments made before the Royal Society on the 16th of Feb. 1737-8. 4to. 9 pp. 1 plate. (*Phil. Trans.* xli. 200.) *London*, 1739-40-41

† An account of some Electrical experiments made at His Royal Highness the Prince of Wales's House at Cliefden on the 15th April, 1738, where the Electricity was conveyed 420 feet in a direct line. 4to. 2 pp. (*Phil. Trans.* xli. 209.) *London*, 1739-40-41

† Some things concerning Electricity. 4to. 4 pp. (*Phil. Trans.* xli. 634.) *London*, 1739-40-41

Desaguliers, Jean Theophile—*continued.*

† An account of some Electrical experiments made before the Royal Society the 22nd of Jan., 1740-41. 4to, 3 pp. (*Phil. Trans.* xli. 637.) *London*, 1739-40-41

† Electrical experiments made before the Royal Society, March 15, 1740-1. 4to. 2 pp. (*Phil. Trans.* xli. 639.) *London*, 1739-40-41

† Several Electrical experiments, made at various times, before the Royal Society by J. T. D. 4to. 6 pp. (*Phil. Trans.* xli. 661.) *London*, 1739-40-41

Account of some Electrical experiments. 4to. (*Phil. Trans.* 1739, No. 266, p. 200; 1741, Nos. 268, 269, 270, pp. 637, 639, and 661; 1742, p. 14.) *London*, 1739-41-42

Some further observations, &c. 4to. (*Phil. Trans.* abd. viii. 435.) *London*, 1741-2

Some conjectures concerning Electricity, and the rise of vapours. 4to. (*Phil. Trans.* 1742, p. 140.) *London*, 1742

He supposed particles of "Pure Air" to be electric bodies, and always in a vitreous state.—Qy. if by "Pure Air" he meant the oxygen of the atmosphere (as Priestley did), has not this old theory some relation with the modern Ozone theory (electrical oxygen)?—F. R.

† Dissertation sur l'Electricité des corps; qui a remporté le prix . . . Acad. Rle. de Bordeaux. 4to. 28 pp. *Bordeaux*, 1742

† Dissertation concerning Electricity. 8vo. 50 pp. *London*, 1742

French version of his Course of Experimental Philosophy. 4to. 1753

(*Vide* also Eames, John.)

Desains, Edouard François. *Born July 26, 1812, at St. Quentin, Dép. de l'Aisne.*

† Thèse de Phys. Sur la mesure des Courants électriques. 4to. 22 pp. 1 plate. *Paris*, 1837

De Saintot. (*Vide* Cassius.)

Desbordeaux. Sur le moyen d'obtenir un courant constant avec la pile de Wollaston. 4to. (*Comptes Rendus*, xix. 273.) *Paris.*

Descartes (Cartesius) René Du Perron. *Born March 31, 1596, at La Haye, Touraine; died February 11, 1650, at Stockholm.*

Principia philosophiæ, iv. § 33. 4to. *Amstelodami*, 1656

Hat eine philosophische Theorie des Magnetismus gegeben, wonach schraubenformige Ströme vom Nordpol zum Südpol gehen sollen. Principia philosophiæ, iv. 133. (*From Lamont's Handbook*, p. 430.)

Principia philosophiæ. Pt. iv. *Amstelodami*, 1664

Note.—Poggendorff (i. 555) *says: "Discours de la méthode pour bien conduire sa raison et chercher la vérité dans les sciences; plus la Dioptrique, les Météores et la Géométrie.* 1 vol. 4to. *Leyd.* 1637. *Latinisch, und vom Verf vermehrt, Amstelod.* 1644."

De Saint Amans. (*Vide* Saint Amans.)

Deshais. (*Vide* Anon. Medical Electricity, 1763.)

Deschanel. (*Vide* Privat-Deschanel.)

Deschanel. Natural Philosophy: an elementary treatise. Translated and edited, with extensive additions, by Prof. Everett, D.C.L., of Queen's College, Belfast. In four parts. 719 engravings. Part iii. Electricity and Magnetism. *London*, 1872

Desgranges, (Secretary). Compte rendu des travaux de l'Acad. 2me an. 4me Sinestre. 8vo. (*Bordeaux Acad. Actes*, 2me an. pour 1839.) *Paris*, 1840

Deshais. (*Vide* Sauvages, 1749.)

Desmarets, Nicolas. *Born September* 16, 1725, *at Soulaines, Dép. de l'Aube; died September* 28, 1815, *at Paris.*

† Expériences physico-méchaniques . . traduites de M. Hawksbee par feu M. de Brémond . . revues et mises au jour, avec un Discours préliminaire des Remarques et des Notes par M. Desmarets. 2 vols. 12mo. 7 planches. *Paris*, 1754

(*Vide* Hawksbee.)

Desmortiers, Lebouvier. Observations sur le danger du Galvanisme dans le traitement des maladies. 4to. (*Journ. de Phys.* 1801, p. 467.) *Paris*, 1801

† Examen des principaux systèmes sur la nature du fluide électrique; et sur son action dans les corps organisés et vivants. 8vo. 360 pp. 2 plates. *Paris*, 1813

Désormes, C. B. Expériences et observations sur les phénomènes physiques et chimiques que présente l'appareil de Volta. 8vo. (*Ann. de Chim.* xxxvii. 1801, p. 284.) *Paris*, 1801

Désormes et Hachette. Mémoire pour servir à l'histoire de cette partie de l'électricité qu'on nomme Galvanisme. 8vo. (*Ann. de Chim.* xliv. 1802.) *Paris*, 1802

Doubleurs de l'Electricité. 8vo. (*Ann. de Chim.* xlix. 1804.) *Paris*, 1804

† **Desparquets.** L'électricité appliquée au traitement des malades. Manuel pratique. 8vo. 107 pp. *Paris*, 1862

† **Despine.** Sur les Grêles en 1844. 4to. 5 pp. (*Ext. de la Gazette de l'Association Agricole*, No. 23, 3me Année.) *Turin*, 1845

† Recherches sur les Grêles auxquelles sont exposés les Etats de terre-ferme de S. M. le Roi de Sardaigne. 4to. 22 pp. (*Gazette de l'Association Agricole*, 1844, Nos. 29 and 30.) *Turin*, 1844 ?

† Observations sur les Grêles tombes en 1840 dans les Etats de Terre Ferme de S. M. le Roi Sardaigne, d'après les renseignements recueillis par la Commission supérieure de statistique. 4to. 39 pp. (*Turin Acad. Mém.* 2me serie, t. vii.) *Turin*

† **Desplats,** V. Physique Médicale. Lois générales de la production et de la propagation du courant Electrique. Thèse. 8vo. 81 pp. *Paris*, 1863

Despretz, César Mansuète. *Born May* 4, 1791, *at Lessines, Belgium; died March* 16, 1863, *at Paris.*

Traité de physique. *Bruxelles*, 1837

Sur l'action galvanique des métaux. 4to. 31 pp. *Paris*

† Note sur la déviation de l'aiguille aimantée, par l'action des corps chauds et froids. 4to. 6 pp. (*Ext. des Comptes Rendus*, xxix. *Séances des* 27 *Août et* 10 *Sep.* 1849.) *Paris*, 1849

† Note relative à l'Electricité développée dans la contraction musculaire, &c. 4to. 6 pp. (*In Comptes Rendus*, 1849, 1re série, xxviii. No. 22, p. 653.) *Paris*, 1849

Sur la correction qu'il faudrait apporter à la formule exprimant la valeur de l'intensité électrique avec la boussole des tangentes. 4to. (*Comptes Rendus*, xxxv. 449. *Vide Wiedemann*, ii. 196.) *Paris*, 1852

Des applications de l'électricité aux arts et à l'industrie. 8vo. 320 pp. 8 plates. (*In Brux. Acad.* 1859.) *Bruxelles*, 1859

Desrousseaux, E. Sources de l'électricité, force attractive et répulsive, gravitation des astres suivant une nouvelle théorie. Découverte d'une nouvelle force. . . . 8vo. 20 pp. *Paris*, 1864

† Sources de l'électricité, force attractive et répulsive, gravitation des Astres suivant une nouvelle théorie. 2me edition. 8vo. 36 pp. *Paris*, 1864

† L'électricité devoilée, et son rôle dans la matière. Nouveau système du monde basé sur le calorique et l'électricité agissant comme forces motrices. 2me édition. 8vo. 107 pp. *Paris*, 1868

† **Dessaignes.** Extract from a memoir on Phosphorescence, presented to the Institute by Dessaignes (Journ. des Mines, xxvii. 213), on April 5, 1809. 8vo. 11 pp. (*Phil. Mag.* xxxviii. 3.) *London*, 1811

On the Phosphorescence of the compressed Gases. 8vo. 2 pp. (*Phil. Mag.* xliv. 313.) *London*, 1814

† **Detienne.** A peculiar construction of the conductor of an Electric Machine for increasing the action thereof. 4to. (*Jour. de Phys. Juillet*, 1775.) *Paris*, 1775

Metodo per avere . . . un perfetto isolamento. 12mo. 6 pp. (*Scelta d'Opuscoli in* 12mo. xxiv. 96.) *Milano*, 1776

De Thury. (*Vide* Hériçart de Thury.)

De Tolley. (*Vide* Crimotel de Tolley.)

Deux-Ponts-Bérigny, E. A. Observations faites à Versailles avec le papier dit ozonométrique de M. Schönbein, pendant le mois d'Août, 1855. 8vo. 12 pp. *Paris*, 1856

Deverdun, De Borda, e Pingré. Voyage (par ordre du Roi) . . . la frégate Flora en 1771-2 . . . 4to. 2 vols. *Paris*, 1778

Deville. (*Vide* Ste. Claire-Deville.)

† **Devillers.** Le Colosse aux pieds d'Argile. 8vo. s.l. 174 pp. (Mesmerism.) (*Volta's copy.*) 1784

† **Devincenzi,** G. Procédé de gravure électrochimique . . . 4to. 2 pp. (*Ext. des Comptes Rendus de l Acad. séance 5 Nov.* 1855.) *Paris*, 1855 ?

† **Diamilla-Muller,** D. Physique du globe. Recherches sur le magnétisme terrestre. 32 pp. 9 plates. *Torino e Firenze*, 1870

*† **Dickinson,** R. Prospectus of a new system of Beaconing. (Not Electrical.) 8vo. 7 pp. 1 plate. (*Phil. Mag.* l. 443.) *London*, 1817

Dieman. (*Vide* Carradori, 1790.)

Dienger, Jos. Über die Gleichgewichtslage einer Magnetnädel, die unter dem Einflusse eines Magneten steht, und über magnetische Curven. (*Grunert's Arch.* xii. 307.)

Über din Verlust an Elektricität durch die Luft. (*Grunert's Archiv*, xi. 1848.) 1848

Dietrich, A. Die Elektricitätsverhältnisse der Atmosphäre und der Erdoberfläche unter dem Einfluss der Eisenbahnen und der elektrischen Telegraphie. 8vo. 38 pp. *Dresden*, 1858

Dietrich, P. F. von. Sur les conducteurs des édifices anciens. 4to. (*Schrift. Gesellsch. nurf Fr. in Berlin*, xxv. 1784.) *Berlin*, 1784

Digby, Sir Kenelm. *Born July* 11, 1603, *Gothurst, Buckinghamshire; died June* 11, 1665, *at London.*

Demonstrationes immortalitatis animæ . . . 8vo. *Frankfurt*, 1664

There are several English editions, the first in 1644: "*De attractionibus electricis earumque causis, in seiner Demonstratio immortalitatis animæ Francof*, 1664, *einer Uberset. eines* 1644 *zu Paris, in engl. Sprache erscheinenes Werks.*" *Geoloth. Bibliot.* 2 *Stuck, p.* 269, *refers to pp.* 219-22 *for the above.*

Digges, Leonard. *Born at Digges Court, Kent; died about* 1573.

Prognostication everlasting of right good effect; or Choice Rules to judge the Weather by the sun, moon, and stars, etc. 1555

† **Digges**, Thomas. *Died August* 24, 1595, *at London.*

A Prognostication everlasting of right good effecte, &c. . . . Published by Leonard Digges, lately corrected and augmented (by T. D.) his Son. 4to. (*From Watt. Watt gives the dates* 1576-78-92.) *London*, 1592 ?

Digney. Trasmettitore automatico di Digney (Telegrafia.) (*From Matteucci.*)

Dijon Academy. Mémoires de l'Académie de Dijon. 8vo. *Dijon*, 1739-84

Dilthey. De electro et Eridano. 4to. *Darmstadt*, 1824

Dingler, J. F. &c. Polytechnisches Journal u. s. w. herausgegeben erst von ihm allein von 1820 to 1831, Bd. i.—xxxix. dann bis 1840, Bd. lxviii., mit seinem Sohn Emil Max, darauf bis zur Gegenwart von Letzterem. 8vo. *Stuttgart*, 1856

Dingley, Robert. *Born* ; *died July* 9, 1781.

Observations on Thunder. 12mo. *London*, 1658

D'Innare, C. F. Gedanken über Vulkane, Erdbeben und gegenwärtige Witterung. 8vo. *Frankfurt u. Leipzig*, 1783

† Von der Elektricität (erster Theil). 8vo. 481 pp. 16 plates. *Frankfurt*, 1784

Dionysius, Areopagita. Rites et observationes antiquæ. A.D. 50

Dirks, H. Perpetuum mobile. Search for self-moving power during the 17th, 18th, and 19th centuries. . . . 8vo. *London*, 1861

† **Dircks**, H. Contributions towards a history of Electro-Metallurgy, establishing the origin of the art. 8vo. 102 pp. *London*, 1863

Diruff, C. J. Ideen z. Naturerklär. d. Meteor od. Luftsteine. 8vo. *Göttingen*, 1804

Disney, R. W. Dissert. de electricitate. 8vo. (*From Guitard.*) *Leyde*, (*London* ?) 1790

Dispan. On Electrum. *Toulouse*, 1827

Dittmar, S. G. Der Polarschein oder das Nordlicht nach einer neuen naturgemässen Theorie erklart. *Berlin*, 1831

Ditton. Longitude and latitude found by the inclinatory and dipping needle. 8vo. *London*, 1719

Longitude and Latitude found by the inclinatory and dipping needle. With the laws of Magnetism discovered by R. Norman. 8vo. *London*, 1721

Divisch, Procopius. *Born August* 1, 1696, *at Senftenberg Mähr; died December* 21, 1765, *at Prendiz.*

"Erfand einen Wetter ableiter. Beschrieben in Pelzel's Abbild, böhm u. mähr. Gelehrt. Bd. iii." (*From Poggendorff*, i. 580.)

Längst. verlangte Theorie von der meteorologischen Elektricität. 8vo. *Tübingen*, 1768

Dixon, Pat. Account of a cure of a Dumb Person. (*London Magazine.*) *London*, 1752

Doat. A Pile. Described by Du Moncel. Exposé. 2nd edition, p. 462.

† **Dobelli**, F. La Bussola e le Aurore boreali. 12mo. 32 pp. *Milano*, 1867

† **Dobbie**, W. An attempt to explain the phenomenon known by the name of the Aurora Borealis. 8vo. 9 pp. (*Phil. Mag.* lvi. 175.) *London*, 1820

† On the cause of the Magnetic power of the Poles of the Earth. 8vo. 4 pp. (*Phil. Mag.* lxi. 252.) *London*, 1823

Dobereiner, J. W. Über Electricität, Wärme, und Licht. 8vo. (*Schweigger's Journ.* xxiii. 1818.) *Nürnburg*, 1818

Einfache Voltasche Kette von langer Thätigkeit. 8vo. (*Gilbert's Ann.* lxviii. 1821.) *Leipzig*, 1821

Phyto-elektr.-chem. Versuche u. s. u. 8vo. (*Gilbert's Ann.* lxxii. 1822.) *Nürnburg*, 1822

Über Eschwegit u. merkwürd, Veränder. d. Holzes durch Blitz. 8vo. (*Gilbert's Ann.* lxxiii. 1823.) *Leipzig*, 1823

Lichterscheinungen bei Kristallisationen. 8vo. (*Schweigger's Jour.* xli. 1824.) *Nurnburg*, 1824-8

Die neuesten u. wichtigsten physikalisch-chem. Entdekungen. 4to. *Jena*, 1824

On combustion of Hydrogen by means of spongy Platinum, and his Electrical theory concerning.

Poggendorf, i. 582, *has "Über neu entdeckte höchst merkwürdige Eigenschaften des Platins und die pneumatisch-capillare Thätigkeit gesprungener Gläser." (Schweigger's Journ.* xxxviii. and xxxix. *und Gilbert's Ann.* lxxiv. and lxxvi.)

Poggendorff (i. 584) *after many quotations of his (D.'s) works in Schweigger's Journ. and Gilbert's Annalen, adds: "Fernere Aufsätze im Reichs-Anzeiger* (1803), *Algem. Anzeiger d. Deutschen* (1812), *in Tromsdorff's Journ., Buchner's Repert., Kastner's Archiv, Hänle's Mag., Brande's Arch., u. s. w."*

Dods, J. B. Electro-Psychology. Treatise by Dr. Darling. 12mo. *London*, 1851

Electro-Psychology. Lectures. 12mo. *New York*, 1852

† The philosophy of Electrical Psychology . . 12 Lectures. Stereotype edition. 8vo. 252 pp. *New York*

Dodson, James. (*Vide* Mountain and Dodson.)

† Dodwell R. An illustrated Handbook to the Electric Telegraph. 2nd edition. 8vo. 80 pp. *London, n.d.* (1861 ?)

† Dollond, P. and J. Directions for using the Electric machine made by P. and J. Dollond. 8vo. 24 pp. 1 plate. *London*, 1761

† Dollond, J. The Life of John Dollond, F.R.S., inventor of the Achromatic Telescope. 8vo. 6 pp. portrait. (*Phil. Mag.* xviii. 47.) *London*, 1804

Imputed inventor of the plate electrical machine.

D'Hombre-Firmas, Louis Augustin, Baron. *Born about* 1785, *at Alais; died March* 5, 1857, *at Alais.*

On Alorolithes. 8vo. (*Montpellier Acad. Encontre.*) *Montpellier*, 1809

Recueil de Mémoires et d'Observations de Physique, de Météorologie, d'Agriculture, et d'Histoire Naturelle. 8vo. 6 vols. *Nimes*, 1839-47

† Recueil de Mémoires, etc. 1823-42-44

† Effets de la Foudre. (*Résumé des travaux de l'Académie de Toulouse pendant* 1839-40-41.) *Toulouse*, 1843

Disjouval. (*Vide* Quatremere-Disjouval).

Domin, J. F. von. Sono campanarum fulmina promoveri potius quam prohiberi. *Quinque Ecclesiis*, 1786

Commentatio de electricitate medica in Regio Musæo Quinque Ecclesiensi instituta. *Quinque Ecclesiis*, 1790

Commentatio altera de electricitate medica, &c. (*From Poggendorff*, i. 589.) *Pestini*, 1793

Ars electricitatis. (*From Poggendorff*, i. 589.) *Pestini*, 1794

Ars electricitatem ægris tuto adhibiendi. (*From Poggendorff*, i. 589.) *Pestini*, 1796

Lampadis electricæ optimæ notæ descriptio, &c. (*From Poggendorff*, i. 589.) *Pestini*, 1799

Donaggio, O. Regolatore elettro-magnetico. 8vo. *Milano*, 1857

† Donker, Curtius. Commentatio de convenientia atque differentia effectuum tensionis electricæ et fluxus electrici. 4to. 1 plate. 53 pp. *Lugd. Bat.* 1823

Donndorff, Johann August. *Born March* 23, 1754, *at Quedlinberg; died November* 22, 1837, *at Quedlinberg.*

Schreib. an den Grafen von Borke über Elektricität. 8vo. *Quedlinberg*, 1781

Abhandlung über Elektricität, Magnetismus, Feuer, &c. 8vo. *Quedlinberg*, 1783

† Die Lehre von der Elektricität, theoretisch und praktisch aus einander gesetz. 8vo. 2 vols. 7 large plates. *Erfurt*, 1784

† Donné, Al. Recherches sur les influences . . . météorologiques sur les piles sèches. 8vo. 16 pp. 1829

† Recherches sur quelques unes des propriétés chimiques des sécrétions, et sur les courants électriques qui existent dans les corps organisés. 8vo. 19 pp. *Paris*, 1834

† Donovan, M. Observations and experiments concerning Mr. Davy's hypothesis of Electro-Chemical Affinity. 8vo. (*Phil. Mag.* xxxvii. pp. 227 and 245.) *London*, 1811

† Observations on the inadequacy of the hypothesis at present received to explain the phenomena of Electricity. 8vo. 3 pp. (*Phil. Mag.* xxxix. 396.) *London*, 1812

† Reflections on the inadequacy of the principal hypothesis to account for the phenomena of Electricity. 8vo. (*Phil. Mag.* xliv. 334 and 401.) *London*, 1814

† On the inadequacy of Galvanic hypothesis. . . . Paper read at the Kirwenian Society of Dublin on April 19. 8vo. 2 pp. (*Phil. Mag.* xlv. 381.) *London*, 1815

† A new theory of Galvanism. Paper read at the Kirwenian Society, Dec. 28, and January 11. 8vo. 3 pp. (*Phil. Mag.* xlv. 154.) *London*, 1815

† Observations on a Paper by G. A. de Luc, containing some remarks on Mr. Donovan's reflections concerning the inadequacy of Electrical hypothesis. By M. Donovan. 8vo. 4 pp. (*Phil. Mag.* xlv. 200.) *London*, 1815

† On the Origin, Progress, and Present state of Galvanism. An Essay read at the Kirwenian Society of Dublin on February 22, March 8, and March 22. 8vo. pp. (*Phil. Mag.* xlv. 222 and 308.) *London*, 1815

† Second reply to Mr. De Luc's observations on a Paper entitled "Reflections on the inadequacy of the principal hypothesis to explain the phenomena of Electricity." 8vo. 2 pp. (*Phil. Mag.* xlvi. 13.) *London*, 1815

† Answers to remarks on Mr. Donovan's "Reflections on the inadequacy of Electrical hypothesis." 8vo. 2 pp. (*Phil. Mag.* xlvii. 167.) *London*, 1816

† On a new method of obtaining pure Silver; with observations on the defects of former processes. 8vo. 4 pp. (*Phil. Mag.* xlvii. 204.) *London*, 1816

† Essay on the Origin, Progress, &c. . . of Galvanism. 8vo. 390 pp. 1 plate. *Dublin*, 1816

† On certain improvements in the construction of Galvanometers: on Galvanometers in general, and on a new instrument for measuring the relative force of Magnetism in compound needles intended to be nearly astatic. (*Read* May 22, 1848). 4to. 18 pp. (*Trans. Royal Irish Academy*, xxii. part iii. p. 263.) (*Faraday's copy.*) *Dublin*, 1851

Donovan, M.—*continued.*

On Galvanometric Deflections produced by attrition and contact of metals under certain circumstances. Read Jan. 8, 22, and Feb 12, 1849 .4to. 34 pp. (*Trans. Royal Irish Academy*, xxiii.) *Dublin*, 1854

Doppelmayer, Johann Gabriel. *Born* 1671, *at Nürnberg; died December* 1, 1750, *at Nürnberg.* (*Poggendorff*, i. 593.)

† Neuentdeckte Phenomina der electrischen Kraft. u. des dabei . . . erscheinenden Liecht. 4to. 88 pp. *5* plates. *Nurnberg*, 1744

Über das elektrische Licht. 1749

On Electricity. (*From Watt.*)

† **Doppler.** Über eine Reihe markscheiderischer Declinations Beobachtungen aus der Zeitung 1735-36. 8vo. 4 pp. (*Sitzb. d. k Akad.* 1849, v. und vi. Heft. p. 1.) *Wien*, 1849

† Bemerkungen und Anträge, die Einsendungen magnetischer Beobachtungsdaten aus Joachimsthal, Freiberg, Pribram, Leoben, Ischl, und Salzburg betreffend. 8vo. 32 pp. (*Sitzungsb. d. k. Akad.* 1850, iv. Heft. p. 337.) *Wien*, 1850

† Über die neuester Zeit in Freiberg in Sachsen aufgefundenen Declinationsbeobachtungen aus alterer Zeit. 8vo. 3 pp. (*Sitzungsb. d. k. Akad. d. Wiss. Wien*, vii. Bd. i. Heft. p. 160.) *Wien*, 1851

Über eine bisher unbenutze Quelle magnetischer Declinations Beobachtungen. *Wien*, 1860

Doppler, Christian. *Born November* 29, 1803, *at Salzburg; died March* 17, 1853, *at Venice.*

Über d. wahrscheinliche Ursache d. Electricitäts-Erregung durch Berühr. (*Wien polytechnisch Jahrb.* 1834. xviii.) *Wien*, 1834

Über e. merkwürd Eigenthümlichk. d. elect. Spannung. 8vo. (*Baumgartner und J. v. Holger's Zeitschr.* v. 1837.) *Wien*, 1837

Beitr. z. Elektricitäts-Erreg. durch Reibung. (*Hessler's encyclop. Zeitsch.* 1842.) 1842

† Versuch einer auf rein mechanischen Principien sich stützenden Erklärung der galvano-elektrischen und magnetischen Polaritäts-Erscheinungen. Fol. 20 pp. 2 plates. *Wien*, 1849

D'Orbissan (Président). Trombe de terre et Aurore boréale (le 8 May, 1780), dans la lettre qu'il écrivit le 13 Mai 1780 à l'Acad. 4to. (*Toulouse Acad.* 1re série, vol. ii. p. 24, *Hist.*) *Toulouse*, 1784

Dorotea, D. L. (*Vide* Accademia degli Aspiranti, &c.)

Dorville, E. Monographie de la pile électrique; sa forme, ses applications, ses perfectionnements. 8vo. 24 pp. *Paris*, 1857

† Resumé des travaux qui ont précédé l'union de l'Amérique et de l'Europe par l'électricité au moyen d'un câble sous-marin transatlantique. 8vo. 16 pp. *Paris*, 1857

Double, F. J. De l'influence galvanique sur le sang. (*Recueil périodique de la Soc. de Méd.* xvi. pluviose, an. xi. p. 65.) *Paris*, 1803

Dove, Heinrich Wilhelm. *Born October* 6, 1803, *at Siegnitz.*

Über Hygrometeore; üb. d. Gewitter üb. mittl. Luftströme; ub. Barometr. Minima. 8vo. (*Poggend. Ann.* xiii. 1828.) *Leipzig*, 1828

Correspondirende Beobachtungen über die regelmässigen stündlichen Veränderungen und über die Perturbationen der magnetischen Abweichung im mittleren und östlichen Europa . . . mit einem Vorworte von Alexander von Humboldt. 8vo. 35 pp. 2 plates. *n.d.*

Uber gleichzeit. Störung in d. tagl. Variat. und Declinat. d. magnet. Kraft. 8vo. (*Poggendorff, Ann.* xx. 1830.) *Leipzig*, 1830

Dove, Heinrich Wilhelm.—*continued.*

Über elektro-magnet. Anzieh. und Abstoss. 8vo. (*Poggendorff, Ann.* xxviii. 1833.) *Leipzig*, 1833

Magneto-elektr. Electromagnete. 8vo. (*Poggendorff, Ann.* xxix. 1833.) *Leipzig*, 1833

Discontinuat. d. Blitze; opt. Eigensch. d. Diopsids. 8vo. (*Poggendorff, Ann.* xxxv. 1835.) *Leipzig*, 1835

Apparat fur geradlin, circular, und elliptic Polarization. 8vo. (*Poggendorff, Ann.* xxxv. 1835.) *Leipzig*, 1835

Versuche ub. Circularpolarization. 8vo. (*Poggendorff, Ann.* xxxv. 1835.) *Leipzig*, 1835

Magneto-elektr. Apparat usw. 8vo. (*Poggendorff, Ann.* xliii. 1838.) *Leipzig*, 1838

Thermo-säule für constante Ströme. 8vo. (*Poggendorff, Ann.* xliv. 1838.) *Leipzig*, 1838

Magnetisme. Bericht der Berl. Akad. 1839

Inducirte Ströme, die galvano-metr. gleich wirken, physiolog. aber ungleich. 8vo. (*Poggendorff, Ann.* xlix. 1840.) *Leipzig*, 1840

Gesetz d. Stürme. 8vo. (*Poggendorff, Ann.* lii. 1841.) *Leipzig*, 1841

Über d. durch Magnetisiren d. Eisens mittelst Reibungs elektricität inducirt. Ströme. (*Poggendorff, Ann.* liv. 1841.) *Leipzig*, 1841

Magnetism. d. sogenannt unmagnet. Metalle. 8vo. (*Poggendorff, Ann.* liv. 1841.) *Leipzig*, 1841

† Über Induction durch electromagnetisirt Eisen. 4to. 91 pp. 1 plate. *Berlin*, 1842

Über d. Gegenstrom zu Anfang und zu Ende eines primären. 8vo. (*Poggendorff, Ann.* lvi. 1842.) *Leipzig*, 1842

Ob der Funke bei Unterbrech. e. elektr. Stroms im Moment der Unterbrech oder später erscheine? 8vo. (*Poggendorff, Ann.* lvi. 1842.) *Leipzig*, 1842

Über d. inducirten Ströme in massiv. Eisen und eisern Drahtbündeln bei Annäherung e. Stahlmagnets. 8vo. (*Poggendorff, Ann.* lvi. 1842.) *Leipzig*, 1842

† Untersuchungen im Gebeite der Inductions Elektricität. Eine in der Akad. der Wissensch. zu Berlin gelesene Abhandlung. 4to. 96 pp. 1 plate. (*Faraday's copy.*) *Berlin*, 1842

† Literatur des Magnetismus und der Elektricität. 8vo. 37 pp. (*In his Repertorium de Physik*, tom. v. p. 152.) *Berlin*, 1844

Ladungs strom d. elektr. Batterie. 8vo. (*Poggendorff, Ann.* lxiv. 1845.) *Leipzig*, 1845

† Über Wirkungen aus der Ferne. Eine am 1 März im Vereine fur wissenschaftliche Vortrage gehaltene Vorlerung. 8vo. 44 pp. *Berlin*, 1845

† Das Gesetz der Stürme in e. Beziehung zu der algemein Bewegung der Atmosphere 3te schr. vermehrte Auflage. 8vo. 346 pp. 2 maps. *Berlin*, 1866

Über Ströme von Flaschen saulen. 8vo. (*Poggendorff, Ann.* lxxii. 1847.) *Leipzig*, 1847

† Über Elektricität. Eine am 26 Feb., im Vereine für Weissenschaftl. Vorträge gehaltene. 8vo. 38 pp. *Berlin*, 1848

Methode gespannt Saiten u. elast. Federn, mittels e. Elektromagnets, in tonende Schwingg. usw. zu versetzen. 8vo. (*Poggendorff, Ann.* lxxxvii. 1852.) *Leipzig*, 1852

Über das elektr. Licht. 8vo. (*Poggendorff, Ann.* lxxxvii. 1852.) *Leipzig*, 1852

Dove, Heinrich Wilhelm.—*continued.*

† Über das Gesetz der Stürme. 8vo. 1st edition, 115 pp. 1 map. (*Besonderer Abdruck aus des Verfassers "Klimatologische Beiträge."*) *Berlin*, 1857

The Law of Storms: considered in connection with the ordinary Motions of the Atmosphere. With diagrams and charts of storms. 8vo. Translated, with the Author's sanction and co-operation, by Robert H. Scott, M.A. Trin. College, Dublin. *London*, 1862

The Law of Storms: considered in connection with the ordinary Movements of the Atmosphere. With diagrams and charts of storms. 2nd edition, 8vo. 330 pp., entirely revised and considerably enlarged. Translated by Robert H. Scott. *London*, 1862

Die Stürme der gemässigten Zone: mit besonderer Berücksichtigung der Stürme des Winters 1862-63. 8vo. 120 pp. *Berlin*, 1863

† Das Gesetz der Stürme: in seiner Beziehung zu den algemeinen Bewegungen der Atmosphäre. *Dritte* sehr vermehrte Auflage. 8vo. 346 pp. 2 plates. *Berlin*, 1866

Many Papers, &c. in the "Monatsbericht d. Berlin Akademie," the greater part of which are in *Poggendorff's Annalen.*

† Über den Sturm vom 17 November, 1866. 4to. 50 pp. 2 plates. (*Abhandl. d. k. Akad. d. Wissen. zu Berlin*, 1867.) *Berlin*, 1867

† Gedächtnissrede auf Alex. von Humboldt gehalten in der öffentl. Sitzung d. Konigl. preuss. Akad. d. Wissnch. zu Berlin am 1 Juli dem Leibnitztage des Jahres 1869. 8vo. 31 pp. *Berlin*, 1869

Dove and Moser. Repertorium der Physik. 8vo. 7 vols.
Treidlander, Cat. 1871, p. 12, *says*: "*Unter Mitwirkung von Lejeune-Dirichlet, Jacobi, Neumann, Riess, Seebeck, etc.* 8 *Bds. Berlin*, 1837-49. 8vo. *Vollständiges Exemplar*, 7.20." *Berlin*, 1837-49

† **Drago, Raffael.** Sulla relazione dei fenomeni meteorologici colle variazioni del magnetismo terrestre. 2nd edition, 8vo. 88 pp. *Genova*, 1870

Dralet, On a Trombe, with thunder, &c. *Toulouse*, 1830

Draper, J. W. *Born May 5*, 1811, *near Liverpool.* (*Articles in Journal of Franklin Institute, and Silliman's Journal.*)

Drebbel, C. De natura elementorum; quomodo venti, pluviæ, fulgura, tonitrua, ex iis provocentur et quibus serviant usibus. *Hamburg*, 1621

† **Dree, De.** On the Stones said to have fallen at Ensisheim, and at other places. 8vo. 8 pp. From the Memoir of M. De Dree. (*Phil. Mag.* xvi. 289.) *London*, 1803

† Account and Description of a Stone which fell from the clouds in the Commune of Sales, near Ville-Franche, in the Department of the Rhone. From a Memoir of M. De Dree, read in the National Institute, April 11, 1803. 8vo. 8 pp. (*Phil. Mag.* xvi. 217.) *London*, 1803

Drescher, L. Die Electromagnetische Telegraphie: oder leichtfassliche u. speciclle Beschreibung der vorzüglichsten electromagnetischen Telegraphen-Apparate u. d. Anwendung derselben in d. Praxis. 4to. 38 pp. *Cassel*, 1848

† Die Electromagnetische Telegraphie . . . und die Anwendung derselben in der Praxis. 2 Abdruck. 4to. 38 pp. 4 plates. *Cassel*, 1849

† **Dropsy, J.** de Cracovie. Electro-thérapie, ou application médicale pratique de l'Electricité; basée sur de nouveaux procédés. Ouvrage présenté au concours décrété par S.M. l'Empereur des Français. 8vo. 170 pp. *Paris*, 1857

† **Drummond, T.** On Meteoric Stones. 8vo. (*Phil. Mag.* xlviii. 28.) *London*, 1816

Dub, Christophe Julius. *Born August 16*, 1817, *at Berlin.*

De ancoris electromagnetum, Dissertatio. 8vo. 42 pp. *Berolini*, 1848

† Über die anziehende Wirkung der Elektromagnete. 8vo. (*Poggendorff, Ann.* lxxx. u. lxxxi. 1850, u. lxxxv. 1852.) *Leipzig*, 1850, 1852

Dub, Christopho Julius.—*continued.*

Gesetze der Anziehung hufeisenförmiger Elektromagnete. (*Poggendorff, Ann.* lxxxvi. 1852.) *Leipzig*, 1852

Gesetze der Anziehung stabförmiger Elektromagnete. 8vo. (*Poggendorff, Ann.* xc. 1853.) *Leipzig*, 1853

Über Elektromagnetische Spiral-Anziehung. 8vo. (*Poggendorff, Ann.* xiv. 1855.) *Leipzig*, 1855

† **Dub**, J. Die Gesetze des Electromagnetismus im weichen Eisen. 4to. 42 pp. *Berlin*, 1853

† Der Electromagnetismus. 8vo. 516 pp. *Berlin*, 1861

Über die Gesetze d. Vertheilung des Magnetismus in Elektromagneten. *Berlin*, 1862

† Ueber den Einfluss der Dimensionen des Eisenkernes auf die Intensität der Elektromagnete. Eine Experimental-Untersuchung. 8vo. 48 pp. *Berlin*, 1862

† Die Anwendung des Elektromagnetismus mit besonderer Berücksichtigung der Telegraphie. 8vo. 645 pp. *Berlin*, 1863

Dublin Philosophical Journal and Scientific Review. 8vo. *Dublin*, 1825

Dublin Royal Irish Academy. Transactions of the Royal Irish Academy. 4to. *Dublin and London*, 1788

Index to the Transactions of the Royal Irish Academy from 1786 to the present time. By N. Carlisle. 4to. (*From R. S. Cat.* p. 592.) *London*, 1813

Proceedings of the Royal Irish Academy. 8vo. (*From Cat. R. S.* 1839, p. 592.) *Dublin*, 1836

† Scientific Papers read before the Royal Irish Academy, and published in its proceedings. Vol. i. 8vo. *Dublin*, 1866

Dubois. Lettre, etc. (in Tableau des Sciences). (*Pogg.* i. 607.) *Paris*, 1776

† **Dubois**, E. De la déviation des Compas à bord des navires, et du moyen de l'obtenir à l'aide du Compas de déviations. 8vo. 56 pp. *Paris*

Dubois-Reymond, Emil H. *Born November* 7, 1818, at Berlin.

Über den sogenannt. Froschstrom und den Elektromot. Fische. 8vo. (*Poggendorff, Ann.* lviii. 1843.) *Leipzig*, 1843

Quæ apud veteres de piscibus extant argumenta. (*Poggendorff*, i. 228.) *Berolini*, 1843

† Untersuchungen über thierische Electricität. Vol. i. 8vo. *Berlin*, 1848

Sur l'Electricité animale. 8vo. *Berlin*, 1850

† Note sur la loi du courant musculaire, etc. 8vo. 9 pp. *Paris*, 1850

† Note sur la loi qui préside à l'irritation électrique des nerfs, etc. 8vo. 11 pp. *Paris*, 1850

† Über thierische Bewegung. Rede gehalten im Verein fur wissenschaftliche Vorträge am 22 Feb. 1851. 8vo. *Berlin*, 1851

Untersuch. über Thier Elektricität. (*Berlin Acad.* 1852-3.) *Berlin*, 1852-53

† Animal Electricity. Edited by H. B. Jones. 8vo. 214 pp. *London*, 1852

† On C. Matteucci's letter to Bence Jones, editor of an abstract of Du Bois-Reymond's Researches in Animal Electricity. 8vo. 41 pp. *London*, 1853

Über Zitterwelse und thierische Elektricität. 8vo. *Berlin*, 1853

† Theilte die dritte Fortsetzung seiner Untersuchungen über thierische Elektricität mit. 8vo. 46 pp. (*Monatsb. d. Akademie der Wissenschaften, Berlin, 6 und 20 Januar*, 1853, *Gesammt sitzungen der Akademie.*) *Berlin*, 1853

† Uber Ströme die durch Andrücken feuchter Leiter an Metall-Leiter entstehen 8vo. 14 pp. (*Faraday's copy.*) 8vo. 14 pp. *Berlin*, 1854

Dubois-Reymond, Emil H.—*continued.*

Verfahren, um feine galvanometr. Versuche einer grossen Versammlung zu zeigen. 8vo. (*From Poggendorff*, i. 228.) *Leipzig*, 1855

† Theilte die zweite Fortsetzung seiner Untersuchungen über thierische Electricität mit. 8vo. 30 pp. *Berlin*

† Untersuchungen über thierische Electricität. 8vo. *Berlin*, 1860

† Beschreibung einiger Vorrichtungen und Versuchsweisen zu Elektrophysiologischen Zwecken. 4to. 89 pp. *Berlin*, 1863

† Nachtrag, 23 Juni, 1870. Gesammtsitzung der Akademie. *Berlin*, 1870

Poggendorff (i. 228) *says, at the end of his list of Dubois' works:* "*Antheil an den Jahresberichten: Die Fortschritte der Physik*, 1847-48-50.

Dubois-Reymond and **Beets.** Zur Theorie der Nobilischen Farbenringe. 8vo. (*Poggendorff, Ann.* lxxvi.) *Leipzig*, 1846

Duboscq, J. Note sur un régulateur électrique. 4to. (*Comptes Rendus*, xxxi. 807.) *Paris*, 1850

† Description d'un appareil de lumière électrique. 8vo. 4 pp. *Paris*, 1853

Du Bourg. (*Vide* Barbou du Bourg.)

Ducala-Bonifas, M. Histoire naturelle du monde. *Genève*, 1782

Duchemin, M. Les bouées électriques. 8vo. 8 pp. *Paris*, 1866

Duchenne, G. B. (de Boulogne). Modèle et description d'un appareil électromagnétique à double courant. 4to. (*From Comptes Rendus*, p. 174.) *Paris*, 1849

† Recherches sur l'état de contractibilité et de sensibilité électro-musculaires dans les paralysies du membre supérieur. 8vo. *Paris*, 1850

† Recherches sur les propriétés physiologiques et thérapeutiques de l'électricité de frottement, de l'électricité de contact, et de l'électricité d'induction. 8vo. 26 pp. *Paris*, 1851

Appareil volta-faradique à double courant. 8vo. 20 pp. (*Comptes Rendus*, xxviii. 268, 1849.) *Paris*, 1851

† De la valeur de l'électrisation localisée comme traitement de l'atrophie musculaire progressive. 8vo. 24 pp. (*Extrait du Bulletin de Thérapeutique*, 1853, pp. 295, 407, et 438.) 1853

† De l'influence de l'électrisation localisée sur l'hémiplégie, rhumatisme de la face, etc. 8vo. 27 pp. *Paris*, 1854

† De l'électrisation localisée et de son application à la physiologie, à la pathologie, et à la thérapeutique. 8vo. 926 pp. cuts. *Paris*, 1855

† Note sur quelques nouvelles propriétés différentielles des courants d'induction du premier et du second ordres. 8vo. 11 pp. (*Communiqué à l'Académie de Médecine le* 18 *Mars*, 1856.) *Paris*, 1856

Recherches électrophysiologiques et pathologiques sur les muscles qui meuvent le pied. *Paris*, 1856

† De l'électrisation localisée, et de son application à la pathologie et à la thérapeutique. 2me édition, entièrement refondue. 8vo. 1046 pp. 1 plate. *Paris*, 1861

† Physiologie des mouvements démontrée à l'aide de l'expérimentation électrique et de l'observation clinique et applicable à l'étude des paralysies et des déformations. 8vo. 872 pp. *Paris*, 1867

Examen critique des principales méthodes d'Electrisation. 3me édition. 8vo. 111 pp. *Paris*, 1870

De l'Electricité localisée et son application à la Pathologie et à la Thérapeutique, etc. 3me édition, refondue. 2 parts. 8vo. *Paris*, 1872

On localised Electrisation and its application to Pathology and Therapeutics. Translated from the French, with additional notes and observations, by John N. Radcliffe, M.R.C.S.

(*Vide* also Erdmann and Duchenne.)

Ducom. De la puissance et des effets des Ouragans, Typhons, et Tornados, des régions tropicales. Manœuvres à faire à bord des navires pour recevoir ces tempêtes . . . 8vo. 23 pp. 3 plates. *Bordeaux*, 1851

† Ducos, J. B. Résultats cliniques ou pratiques de la méthode électro-thérapeutique. 18mo. 64 pp. *Paris*, 1855

† Résultats cliniques ou pratiques de la méthode électro-thérapeutique du Dr. J. B. Ducos. 5me édition. 16mo. 64 pp. *Paris*, 1865

Due. (*Vide* Hanstoen and Due.)

Du Fay, C. F. *Born September* 14, 1698, *at Paris; died July* 16, 1739.

Concerning Electricity. (*Phil. Trans. Abr.* vol. viii. p. 393.) 1733.4

Hist. de l'Electricité, &c. (*Mém. de l'Acad. Paris, Hist.* p. 4; *Mém.* pp. 23, 73, 233, 457.) *Paris*, 1733

Histoire de l'Electricité, &c. (*Mém. de l'Acad. Paris, Hist.* p. 1; *Mém.* pp. 341, 503.) *Paris*, 1734

† A letter . . . to the Duke of Richmond and Lenox concerning Electricity (Dec. 27, 1733.) 4to. 9 pp. (*Phil. Trans.* xxxviii. for 1733-34.) *London*, 1735

Histoire de l'Electricité. (*Mém. de l'Acad. Paris, Hist.* p. 1; *Mém.* pp. 86, 307.) 1737

On Grey's Experiments (pendulum.) (*Dansig Mem.* vol. i. p. 226.) 1737

On Grey's Experiments (pendulum.) (*Mém. Acad. Paris; Mém.* p. 436.) 1737

Versuche und Abhandlungen von der Electricität derer Körper aus dem Franz. übers. 8vo. 311 and 17 pp. 1 plate. (*His Life is included.*) *Erfurt*, 1745

Anmerkungen über verschiedene mit dem Magnet angestellte Versuche übers. 8vo. *Erfurt*, 1748

An fluidum nervorum sit electricum. *Montpel.* 1749

Thèses de Physiologie. Le Fluide nerveux, est-il un fluide électrique? 12mo. 44 pp. (*Recueil sur l'Elect. Méd.* ii. 405.) *Paris*, 1763

(*Vide* also Anon. Medical Elect. 1763.)

Du Fech. (*Vide* Lozeran du Fech.)

Dufour, L. Recherches microscopiques sur l'étincelle électrique. 8vo. (*Bibl. Univ.* 1855; *Pogg. Ann.* xcix.) *Genève*, 1855

De la tenacité des fils métalliques qui ont été parcourus par des courants galvaniques. 8vo. (*Bibl. Univ.* 1855; *Poggend. Ann.* xcix.) *Genève*, 1855

De l'influence de la température sur la force des aimants. 8vo. (*Bibl. Univ.* 1856.) *Genève*, 1856

† Recherches sur les rapports entre l'intensité magnétique des barreaux d'acier et leur température. 8vo. 52 pp. *Lausanne*, 1858

† Du Fresnel. Douxième Mém. sur l'Electricité Galvanique appliquée aux affections chroniques de l'estomac, des intestins et de la vessie. 4to. 11 pp. *Paris*, 1847

(*Vide* also Fresnel, A.)

Duhalde, Jean Baptiste. *Born Feb.* 1, 1674, *at Paris; died August* 18, 1743, *at Paris.*

Description de l'Empire de Chine. (*Ancient Compasses used on land.*) (*From Becquerel and Becquerel E.* 1859.) 1738

Duhamel du Monceau, Henry Louis. *Born* 1700, *at Paris; died July* 22, 1781, *at Paris.*

Façon singulière d'aimanter un barreau d'acier au moyen auquel on lui a communiqué une force magnétique, quelques fois triple de celle qu'il auroit, si on l'eut aimanté à l'ordinaire. 4to. (*From Rees, Repert.* iv. 376. *In Mém. de Paris*, an. 1745, *Hist.* p. 1, *Mém.* 181.) *Paris*, 1745

Duhamel du Monceau, Henry Louis.—*continued.*

Observation d'une mine de fer attirable par l'aimant. 4to. (*From Reuss, Repert.* iv. 371. *In Mém. de Paris*, an. 1745, *Hist.* p. 47.) *Paris*, 1745

Différents moyens pour perfectionner la boussole. 4to. (*From Reuss, Repert.* iv. 378. *In Mém. de Paris*, an. 1750, *Hist.* p. 1, *Mém.* 154.) *Paris*, 1750

Observation d'une grande variation dans le déclinaison de l'aiguille aimantée le 6 Sept. 1771. 4to. (*Mém. de Paris*, an. 1771, *Hist.* p. 32.) *Paris*, 1771

Description de pleusieurs boussoles qui sont établies dans le parc de Denainvilliers pour observer les variations de l'aiguille aimantée tant en déclinaison qu'en inclinaison. 4to. (*Mém. de Paris*, an. 1772, part ii. *Mém.* p. 44.) *Paris*, 1772

Duhamel, Jean Baptiste. *Born* 1624, *at Vire, Normandy; died August* 6, 1706, *at Paris.* (*Poggendorff*, i. 616.)

De meteoris et possilibus. 4to. *Paris*, 1660

Philosophia vetus et nova in regia Burgundi portracta. 4 vols. 12mo. And also 6 vols. 12mo. (*Lib.* v. *De vi Electrica.*) *Paris*, 1678, 1681, and 1700

Philosophia veteri et nova. 4to. *Nurnberg*, 1682

De corp. affect. lib. i. cap. iii. §1.

Gralath. Elect. Bibliot. 2 *Stuck, p.* 273, *says:* "*De viribus electricis. In Operibus Philosophicis*, tom. ii. *de corporum affectionibus*, lib. ii. cap. vii. p. 200—205, *Edit. Noriberg*, 1681, 4to."

† **Dujardin.** Télégraphie électrique du Dr. Dujardin. 8vo. 11 pp. 2 plates. *Lille*, 1851?

Dujardin, A. Many articles, &c., in the Comptes Rendus on Electric Telegraphs, vols. v. to xxx. 1837 to 1850

Dujardin, A. de Lille. Sur une nouvelle machine électro-magnétique. 4to. (*Comptes Rendus*, xviii. 837, xxi. 528 and 892, xxii. 554, xxiii. 261.) *Paris*, 1844-45-46

Note sur une batterie électro-magnétique, au moyen de laquelle on peut obtenir des courants d'induction très-puissants. 4to. (*Comptes Rendus*, xxi. 1181.) *Paris*, 1845

† **Dujardin, C.** Traité élémentaire de l'Electricité extrait en partie du grand ouvrage de M. Becquerel, et renfermant un Article pratique sur les Paratonnerres par M. Gay-Lussac. s.a. 12mo. *Paris*

Dujardin, P. A. J. Télégraphie électro-acoustique, nouvelle nomenclature des signaux de Chappe par Dr. Dujardin. *Lille*

Dulk, Friedrich Philipp. *Born November* 22, 1788, *at Schirwindt, East Prussia; died December* 14, 1851, *at Königsberg.*

Über Elektromagnetismus. 54 pp. *Königsberg*, 1824

Dumas. (*Vide* Prevost, J. L., and Edwards, W. F.)

Dumas, C. L. De magnetismo animali, &c. . . judicium medicum? 4to. 3 pp. *Montpelii*, 1790

Dumas, Jean Baptiste. *Born July* 15, 1800, *at Alais, Dep. Gard.*

† Rapport sur les nouveaux procédés introduits dans l'art du doreur par MM. Elkington et De Roultz. Commissioners Thenard, D'Arcet, Pelouze, Pelletier, Dumas. 4to. 23 pp. (*Extract des Comptes Rendus . . de l'Acad.* 29 Nov. 1841, xiii. 998.) (Dumas, rapporteur.) *Paris*, 1841

Dumas, Jean Baptiste—*continued.*

Phénomènes qui accompagnement la contraction de la fibre musculaire (mit J. L. Prevost). *Paris*, 1823

† Rapport à l'Empereur du Ministre de l'instruction publique, adjugeant le prix de 50,000 frs. institué en 1852, en faveur de l'auteur des applications les plus utiles de la Pile de Volta ; et à l'effet d'ouvrir un nouveau concours pour une troisième période de 5 ans. 8vo. 37 pp. *Paris*, 1864

Réflexions et Observations (sur le Galvanisme).

Du Menil, A. P. J. Geschichtl.-wissenschaftl. Darstell. d. Stoichometrie u. Elektrochemie. 8vo. *Hannov.* 1824

Du Moncel, Th. . . . Vcte. *Born March 6, 1821, at Paris.*

† Des Observations Météorologiques. 8vo. 63 pp. 1 plate. *Cherbourg*, 1851

† Mémoire sur le télégraphe imprimeur. 8vo. (*Mém. de l'Acad. de Cherbourg*, an. 1851.) *Cherbourg*, 1851

Note sur l'électro-magnétisme et ses applications. 8vo. 12 pp. *Valognes*, 1852

† Mémoire sur le Magnétisme statique et le Magnétisme dynamique. 8vo. 72 pp. *Paris et Cherbourg*, 1852

† Anémographe électrique. "L'Electricité appliquée aux Sciences." 8vo. 43 pp. 1 plate. *Paris*, 1852

Mémoire sur les électro-moteurs. 8vo. 40 pp. *Paris*, 1852

† Des électro-moteurs. 2me édition, revue et augmentée. No. 3, "L'électricité appliquée aux sciences." 8vo. 60 pp. *Paris*, 1852

Sur un moteur électro-magnétique. 4to. (*Comptes Rendus*, xxxiv. 1852.) *Paris*, 1852

Anémographe électrique à onze fils de M. Th. du Moncel. (*Journal l'Union*, 26 *Janvier*, 1853.) *Paris*, 1853

He gives the article in full, and all his inventions are fully described in his "Exposée," and various works printed separately.

† Considérations nouvelles sur l'électro-magnétisme. 8vo. 54 pp. 1 plate. *Paris*, 1853

Sur les monitcurs électriques des chemins de fer. (*Journal de l'Arrondissement de Valognes, Mai*, 1853.) 1853

Réactions des aimants sur les corps magnétiques non-aimantés, ces réactions considérées comme des effets statiques. 4to. (*Comptes Rendus*, xxxvi. 385.) *Paris*, 1853 ?

Nouveau système d'inflammation à distance des substances inflammables par le courant d'un pile de Daniel et des conducteurs très fins. 4to. (*Comptes Rendus*, xxxvii. 953.) *Paris*, 1853

† Exposé sommaire des principes . . . de l'électricité. 8vo. 77 pp. *Paris, Cherbourg*, 1853

† Exposé des applications de l'électricité. 1er volume, Applications physiques et mécaniques. 1re édition, 8vo. 280 pp. *Paris*, 1853

† Exposé des applications de l'électricité. 2e vol. 1re édition. 8vo. 378 pp. *Paris*, 1854

† Théorie des éclairs. 8vo. 46 pp. *Cherbourg*, 1854

Télégraphe imprimeur. (*Vide his Exposé*, tom. ii. 2e édition, p. 130.) 1854

Note sur l'explosion des mines par l'électricité. 4to. (*Comptes Rendus*, xxxix. 649-51.) *Paris*, 1854

† Coup d'œil sur l'état des applications mécaniques et physiques de l'électricité. 8vo. 37 pp. (*La Revue Contemporaire.*) *Paris*, 1855 ?

Du Moncel—*continued.*

† Notice sur l'appareil d'induction électrique de Ruhmkorff et les expériences que l'on peut faire avec cet instrument. 1re édition. 8vo. 152 pp. cuts. *Paris*, 1855

† Moniteur automatique des chemins de fer, imaginé en Mai 1853. 8vo. 16 pp. *Caen*, 1855

† Exposé des applications de l'électricité. Tom. i. et. ii. 2e édition, 8vo. *Paris*, 1856

† Exposé des applications de l'électricité. Applications mécaniques, physiques, et physiologiques. Tom. iii. 2e édition, 8vo. 484 pp. 4 plates. *Paris*, 1857

† Notice sur l'appareil d'induction électrique de Ruhmkorff, et les expériences que l'on peut faire avec cet instrument. 2nd or 3rd edition, 8vo. 222 pp. *Paris*, 1857

† Ruhmkorff's Induction-Apparat u. die damit anzustell. Versuche. Nach d. Franz. v. C. Bromeis u. J. F. Bockelmann. 8vo. 176 pp. *Frankfürt*, 1857

† Notice historique et théorique sur le tonnerre et les éclairs. 8vo. 54 pp. *Paris*, 1857

† Etudes du magnétisme et de l'électro-magnétisme au point de vue de la construction des électro-aimants. 8vo. 268 pp. 1 plate. *Paris*, 1858

† Revue des applications de l'électricité en 1857 et 1858. 4th vol. of *Exposé*. 8vo. 616 pp. 3 plates. *Paris*, 1859

This is called "Suite à l'Exposé des applications de l'électricité," 2e série.

† Notice sur l'appareil d'induction-électrique de Ruhmkorff, suivie d'un mémoire sur les courants induits. 4e édition (rare), 8vo. 400 pp. *Paris*, 1859

† Mémoire sur les courants induits des machines magnéto-électriques. 8vo. 33 pp. *Paris*, 1859

† Etude des lois des courants électriques au point de vue des applications électriques. 8vo. 201 pp. *Paris*, 1860

(*This is called, on the cover of the pamphlet only, "Suite à l'Exposé des applications de l'électricité," 3e série.*)

† Recherches sur la non-homogénéité de l'étincelle d'induction. 8vo. 115 pp. *Paris*, 1860

† Recherches sur les transmissions électriques à travers le sol dans les circuits télégraphiques. 8vo. 31 pp. (*Annales Télégraphiques*, tom. iii. p. 465.) *Paris*, 1861

† Recherches sur les constantes des piles voltaïques. 2e édition, augmentée. 8vo. 32 pp. *Cherbourg*, 1861

† Recherches sur l'électricité. 8vo. 62 pp. (*Extrait des Mémoires de l'Académie de Caen.*) *Caen*, 1861

† Exposé des applications de l'électricité. Tome v. Revue des découvertes faites de 1859 à 1862. 8vo. 244 pp. *Paris*, 1862

Exposé des applications de l'électricité, tom. v. 2d fascicule, Revue des découvertes faites en 1859, 1860, 1861 et 1862, *fin*. 2nd edition. 8vo. 245-560 pp. *Paris*, 1862

† Traité théorique et pratique de télégraphie électrique, à l'usage des employés télégraphistes, des ingénieurs, des constructeurs, et des inventeurs. 8vo. 613 pp. 3 plates. *Paris*, 1864

† Notice sur l'appareil d'induction électrique de Ruhmkorff, 5e édition, entièrement refondue. 8vo. 400 pp. *Paris*, 1867

Notice sur le câble transatlantique. 8vo. *Paris*, 1869

In the *Comptes Rendus* (No. 436) M. Moncel describes his experiments on the Voltaic battery.

† Recherches sur les meilleures conditions de construction des électro-aimants. 8vo. 124 pp. *Paris et Caen* 1871

(*Vide* "*La Science*," journal edited by Du Moncel.)

Du Moncel—*continued.*

† Description des télégraphes électro-chimiques de MM. Caselli et Bonelli. 8vo. 36 pp. 1 plate. (*Annales Télégraphiques*, Mai et Juin, 1863.) *Paris*, 1863

Dumont, Arist. Mémoire sur l'application de la télégraphie électrique au relations sommaires des habitants des grandes villes. 4to. (*Comptes Rendus*, xxxi. 449.) *Paris*, 1850

Dumont d'Urville, Jules Sébastien César. *Born May* 23, 1790, *at Condé sur Noireau, Département du Calvados; died May* 8, 1842, *Paris, Versailles.*

Voyage de découvertes de *l'Astrolabe*, exécuté pendant les années 1826-29. Observations nautiques, météorologiques, hydrographiques, et physiques. *Paris*, 1834

Voyage au Pole Sud et dans l'Océanie, sur les corvettes *l'Astrolabe* et la *Zélée*, exécuté par ordre du Roi pendant les années 1837 à 1840, sous le commandement de J. Dumont d'Urville. 8vo. 34 vols. *Paris*

Physique, par MM. Vincendon Dumoulin et Coupvent-Desbois. 8vo. 4 vols. plates. *Paris*, 1842

Magnetical declinations on board the "Astrolabe," observed by Kosmann, chef de Timoneris, are given in the tables of "Routes des Corvettes," in vol. i.

† Dunbar, W. Description of a singular phenomena at Bâton Rouge, dated June 30, 1800. (Read January 16, 1801.) 4to. 1 p. (*Trans. American Phil. Society*, vol. vi. p. 25, part i.) *Philadelphia*, 1804

Duncan, A. Medical cases, with remarks. *Edinburgh*, 1778

† Dunn, J. Description of the whirlwind at Scarborough on the 24th June, 1823. 8vo. 8 pp. (*Edinburgh Phil. Journal*, x. 11.) *Edinburgh*, 1824

Dunn, Samuel. *Born at Crediton, Dorsetshire; died* 1792.

Magnetic Atlas. (*Fine Work.*) (*From Young*, p. 442.) *London*, 1776

New Atlas of the Mundane system. 1788

Duperrey, Louis Isidore. *Born October* 21, 1786.

Voyage de la *Coquille* pendant les années 1822-25. Physique. 6 vols. *Paris*, 1826

† Observations du pendule invariable, de l'inclination et la déclinaison de l'aiguille aimantée faites dans la campagne de la corvette la *Coquille* pendant les années 1822-25. 8vo. 32 pp. *Paris*, 1827

Du magnétisme terrestre. 8vo. 1834

† Notice sur la position des poles magnétiques de la terre. 4to. 8 pp. *Paris*, 1841

† Réduction des observations d'intensité du magnétisme terrestre faites par M. de Freycinet durant le cours du voyage de la corvette l'*Uranie*. 4to. 12 pp. (*Extrait des Comptes Rendus de l'Académie*, tom. xix. Séance du 2 Septembre, 1844.) *Paris*, 1844

Du Petit Thouars, Abel. Voyage autour du monde sur la frégate *La Vénus* pendant les années 1836-39, publié par ordre du Roi par Abel du Petit Thouars, capitaine de vaisseau. 8vo. 11 (?) vols. atlas folio. *Paris*, 1840-4—

Voyage autour du monde sur la frégate *Vénus* pendant les années 1836 à 1839. Partie physique, par De Tressan. 5 vols. 8vo. atlas in folio. *Paris*, 1842 *to* 1844

Duport, Saint-Clair. Production des métaux précieux au Mexique. *Paris*, 1843

† Dupotet. An introduction to the study of Animal Magnetism. 8vo. (*Roget's copy.*) *London*, 1838

† Du Pré. Articolo di lettera al Brugnatelli. 8vo. 5 pp. (*Ann. di Chim. di Brugnatelli*, ix. 156.) *Pavia*, 1795

Sur l'explication des phénomènes de la chaleur, etc. 8vo. 30 pp. *Paris*, 1828

Duprez, François Joseph Ferdinand. *Born October* 21, 1807, *at Ghent.*

† Mémoire en réponse à la question suivante: On demande un examen approfondi de l'état de nos connaissances sur l'électricité de l'air, et des moyens employés jusqu'à ce jour pour apprécier les phénomènes électriques qui se passent dans l'atmosphère. 4to. 134 pp. *Bruxelles*, 1843

† Statistique des coups de foudre qui ont frappé des paratonnerres, ou des édifices et des navires armés de ces appareils. Mémoire présenté . . . le 5 Décembre, 1857. 4to. 63 pp. (*In Bruxelles Académie*, tom. xxxi. 1859.) *Bruxelles*, 1859

Duprez d'Aulnay, L. Dissertation sur la cause physique de l'électricité. *Paris*, 1746

Dupuis, C. F. Erfand den Telegrafen den Chappe verbessert. 1788

Dupuytren, C. Faits particuliers, et notes sur le galvanisme. *About* 1801

Durand. Introduction à l'électricité. Se trouve en France chez Durand, neveu. 12mo. 144 pp. *Madrid*, 1788

Durand, C. Inquisitiones physico-medicæ circa electricitatem positivam. 4to. 8 pp. *Monspelii*, 1786

† Durand, F. A. Théorie électrique du froid, de la chaleur et de la lumière. 8vo. 36 pp. *Paris*, 1863

Durand, l'Abbé. Le Franklinisme refuté. 12mo. 69 pp. *Paris*, 1788

† Dureau, A. et Moreau, E. L. Des poissons électriques. Exposé anatomique et physiologique, par A. Dureau. Des causes et éléments de production de l'électricité de la Torpille, par E. Lemoine-Moreau. 8vo. 34 pp. *Paris*, 1868

Etude sur les poissons électriques, la Torpille, le Gymnote, la Raie, le silure trembleur. 8vo. 20 pp. *Paris*

Du Roi, J. P. Ueber die Wiener Stahlmagnete. (*Braunschweig, Anzeig* 1775 St. p. 13.) *Braunschweig*, 1775

Neue elektr. Versuche über d. Ausbrüten d. Hühner und Schmetterlings-Eier, über d. Aufkeimen d. Samen u. d. Wuchs d. Pflanzen. *Braunschweig*, 1779

† Du Sable, La télégraphie météorologique en Angleterre. 8vo. 38 pp. *Paris*, 1863

Dutens, Louis. *Born Jan.* 15, 1730, *at Tours; died May* 23, 1812, *at London.*

*† Abhandlung von den Edelstein. Aus dem Franzos. übers. 8vo. (*Baer's Catalogue*, No. vi. *Naturw.* p. 35, 1867.) *Nurnberg*, 1779

Abrégé chronologique pour servir à l'histoire de la physique.

Recherches sur l'origine des découvertes, &c. 2 vols. 8vo. *Paris*, 1766

† Origine des découvertes, &c. 3rd edition. 4to. *London*, 1796

† Dutertre. Des aurores et de quelques autres météores. 8vo. 8 pp. *Le Mans*, 1822

Du Tour, Etienne François. *Born in* 1711, *at Riom, Basse Auvergne; died* 1784, *at Riom.*

On Flame, &c. (*Letter to Nollet.*) 1745

Du Tour, Etienne François—*continued.*

Explication de deux phénomènes de l'aimant, sur les différences qu'apportent les secousses données à un carton sur lequel on étend de la limaille de fer à l'arrangement de cette limaille présentée à la pierre d'aimant. 4to. (*Mém. de Mathém. et de Phys.* i. 375.) *Paris*, 1750

Mémoire sur la manière dont la flamme agit sur les corps électriques. 4to. (*Mémoire de Mathématique et de Physique*, ii. 246.) *Paris*, 1755

† Recherches sur les différents mouvements de la matière électrique. 12mo. 318 pp. 4 plates. *Paris*, 1760

Observation sur le tourbillon magnétique. 4to. (*Mémoire de Mathématique et de Physique*, iii. 233.) *Paris*, 1760

Sur l'électricité en moins. 4to. (*Mémoire de Mathématique et de Physique*, iii. 244.) *Paris*, 1760

Discours sur l'aimant. (*Pièces de Prix de l'Académie de Paris*, tom. v. *Mém.* ii. p. 49.)

Mémoires sur les effets électriques du tonnerre tombé près de Riom en Auvergne 4to. (*Mém. de Paris*, an. 1766, *Hist.* p. 37.) *Paris*, 1766

De la nécessité d'isoler les corps que l'on électrise par communication, et des avantages qu'on corps, convenablement isolé, retire du voisinage des corps non électriques. 4to. (*Mémoire de Mathématique et de Physique*, ii. 516.) *Paris*, 1775

(*Vide* also Euler and others.)

Dutrochet, R. J. H. Nouvelles recherches sur l'endosmose et l'exosmose. (*From Poggendorff*, i. 633.) *Paris*, 1828

(*Vide* also Burnet.)

† **Dutrochet and Bowdich.** On the heights of two Meteors. 8vo. 1 p. (*Phil. Mag.* lvi. 397.) *London*, 1820

Duvert, *vide* Chapot-Duvert.

† **Dwight**, S. E. Notice of a fire-ball on March 21, 1813. 8vo. 2 pp. (*Phil. Mag. or Annals*, iii. 74.) *London*, 1828

Dyckhoff. Expériences sur l'activité d'une pile de Volta dans laquelle les corps humides sont remplacés par des couches minces d'air. 8vo. (*Journal de Chimie de Van Mons*, No. xi. p. 190.) *Bruxelles*

E.

E, B. (*Vide* Anon., Electricity, 1804.)

Eames, John. Extract from the Journal-books of the Royal Society concerning Magnets having more poles than two; with some observations by Désaguliers on the same subject. 4to. (*Philosophical Transactions* for 1738, p. 383.) *London*, 1738

Eandi, Giuseppe Antonio Francesco Geronimo. *Born October* 12, 1735, *at Salluzo; died October* 1, 1799, *at Turin.*

† Memorie istoriche intorno gli studi del Beccaria. 8vo. (*Vide* Beccaria.) *Torino*, 1783

† Sur l'électricité dans le vide. Lu le 10 Mai, 1790. 4to. 11 pp. (*Mémoires de Turin*, an. 1790-91, printed 1793, p. 7, tom. v.) *Turin*, 1793

Résolution des questions suivantes de l'électricité. 1. L'air, est-il électrique par frottement? 2. La lumière excitée par le frottement dans les corps, est-elle électrique? 3. Les corps résineux, dégagent-ils de l'électricité par la chaleur et la fusion? 4to. (*Mémoires de Turin*, vi. pt. i. p. 1, 1802.) *Turin*, 1804

† Notice sur la vie et les ouvrages d'Eandi, par A. M. Vassalli-Eandi. Lue le 3 pluviose, an. xi. 4to. 75 pp. (*Mémoires de Turin*, an. x. et xi. 1802-3, printed xii. 1804, p. 1.) *Turin*, 1804

Eandi et Vassalli-Eandi. Physicæ experimentalis lineamenta: ad subalpinos. 8vo.

The 2nd vol. at p. 149, *Volta's "Atmospheric Apparatus." The work has copious notes, a learned historical preface, and a Physical Bibliography.* *Torino*, 1793-94

Eandi, Vassalli Antonio Maria. (*Vide* Vassalli-Eandi.)

Antonio Maria Vassalli was nephew of Giuseppe Antonio Eandi, and added the name of his uncle to his own, thus calling himself Antonio Maria Vassalli-Eandi.

Ebel, Johann Gottfried. *Born October* 6, 1764, *at Züllichau, Schles.; died October* 7 (8), 1830, *at Zürich.*

Manuel du voyageur en Suisse.

Ebensperger, J. L. Die Einrichtung des Telegraphen. Eine gemeinfassliche Belehrung. 8vo. 84 pp. *Zwickau*, 1854

Eberhard, Christoph. *Born* 1675; *died* 1730, *at Halle.*

Versuch einer magnetischen Theorie. 4to. *Leipzig*, 1720

Specimen theoriæ magneticæ, quo ex certis principiis magneticis ostenditur, vera universalis methodus inveniendi longitudinem et latitudinem, confectum a Ch. Eberhard, Londini, Oct. 31, 1718, nunc vero juris publici factum a S. B. W. Lips. *Lips.* 1720

Note.—From Poggendorff, i. 640, *who adds: "This Anonym. gab davon auch e. deutsche Uberset. Lipzig*, 1820."

Eberhard, Johann Peter. *Born December* 2, 1727, *at Altona; died December* 17, 1779, *at Halle.*

Gedanken von Feuer und den damit verwandten Körpern, dem Licht und der elektrischen Materie, &c. 8vo. *From Krunitz*, p. 39, *and from Poggendorff*, i. 640, *and Hensius*, i. 722.) *Halle*, 1750

Gedanken von d. Ursachen d. Gewitter u. ihrer Aehnlichkeit mit d. Electricität. (*Wochenth. Halle 'sche Anzeig*, 1754.) *Halle*, 1754

Von den Ursachen d. Nordlichts und dessen Aehnlichkeit mit d. Elektricitat. (*Wochenth. Halle 'sche Anzeig*, 1758.) *Halle*, 1758

Vorschläge zur bequemern und sichern Anlegung der Pulvermagazine. 8vo. (*From Kuhn* (1866), p. 273.) *Halle*, 1771

Ebert, F. A. Algemeines bibliographisches Lexikon. 2 vols. 4to. *Leipzig*, 1821-30

A translation (English) in 4 vols. 8vo. *Oxford*, 1837

† **Ebner**, Freiherr. von. Ueber die Anwendung der Reibungs-Electricität zum Zünden von Sprengladungen. 8vo. 27 pp. 5 plates. (*Aus den Sitzungsbn. der k. Akad. der Wissensch.* xxi. Bd. 1 Hft.) *Wien*, 1806

† **Eckeberg**, C. G. Bericht von einem Nordscheine welcher auf der Ausreise auf dem Schiffe der ostindischen Gesellschaft Sophia Albertina d. 30 Jan. 1755, bemerket worden. 8vo. 4 pp. (*K. Schwed. Akad. Abh.* xix. 58.) *Hamburg and Leipzig*, 1757

† **Ecker**, A. Eine Beobachtung uber die Entwicklung d. Nerven d. elektr. Organs von Torpedo Galvanii. 10 pp. 1 plate. (*Zeitschrift. fur wissensch. Zoologie*, i. Bd. 1 Heft, Leipzig, 1848.) *Leipzig*, 1848

Eckhardt, C. Beiträge zur Anatomie und Physiologie. (*From Meyer.*)

Ecole de Médecine de Paris. (*Vide* Hallé.)

Economista. (*Vide* L'Economista.)

Edinburgh Encyclopædia. By Sir D. Brewster. 18 vols. 4to. *Edinburgh*, 1810-30

Edinburgh Journal of Science. New series, by D. Brewster. 8vo. *Edinburgh*, 1831-32

Edinburgh Philosophical Journal, exhibiting . . . progress of discovery in Natural Philosophy . . . by D. Brewster and Jameson. *Edinburgh*, 1819-24

Idem. by Jameson. The whole in 14 vols. 8vo. *Edinburgh*, 1824–26

Edinburgh New Philosophical Journal. Conducted by R. Jameson (and L Jameson). 8vo. . . . to 1854. *Edinburgh*, . . . 1854

Idem. New series. 8vo. 1855 to . . . *Edinburgh*, 1855 . . .

Exhibiting a view of the progressive discoveries . . . in the Sciences and Arts. New series. Editors—T. Anderson, Sir W. Jardine, J. H. Balfour; for America, H. D. Rogers. *London and Edinburgh*

Edinburgh Royal Physical Society. Instituted 1771. Proceedings of. 8vo.

Essays and observations, Physical and Literary. 8vo. 3 vols. *Edinburgh*, 1754-71

Transactions of the Royal Society of Edinburgh. 4to. *Edinburgh*, 1788

Proceedings of the. 8vo. *Edinburgh*, 1832

Edlin von Born. (*Vide* Prag.)

Edlund, Erik. *Born March* 14, 1819, *at Nerike.* (*Works on Electricity, &c., in Danish and other Journals. Vide Pogg.* i. 643.)

Edmé. (*Vide* St. Edmé.)

Edwards, William Frederic. *Born April* 14, 1777, *at Jamaica; died* 1842, *at Paris.* (*Poggendorff*, i. 644.)

† De l'influence des agens physiques sur la vie. 8vo. 654 pp. *Paris*, 1824

Note.—An appendix contains matter on Electricity compiled by Prevost and Dumas.

† **Eeles**, H. Letter concerning the cause of Thunder. 4to. (*Phil. Trans.* an. 1752, p. 521.) *London*, 1752

Philosophical Essays, in several letters to the Royal Society. 8vo. 189 pp. *London*, 1771

Note.—Latimer Clark's Cat. says: "An edition was published at the same time in Dublin from same type, except the title-page."

Egeling. Diss. de electricitate. 4to. *Ultrai*, 1759

Egell, A. Observationes in historiam phosphororum naturalium. *Wirceb.* 1773

† **Egger.** Phys. u. statist. Beschreibung von Island-Nordlichts. 1 Theils. 1 Abtheil. p. 245. 8vo. *Kopenhagen*, 1786

† **Ehrenberg,** C. G. Das Leuchten d. Meeres. Neue Beobachtungen nebst Uebersicht der Hauptmomente der geschichtlichen Entwicklung dieses merkwürdigen Phenomens. Ein in d. Königl. Akad. d. Wissensch. im April, 1834, gehaltener Vortrag, mit einigen Zusätzen gedruckt im October, 1835. *Berlin*, 1835

Über d. Meteorstaubfall i. Schles. am 31 Jan. 1848. 8vo. *Berlin*

† Über d. sehr merkwürdigen Passatstaub-Fall . . . am 17 Feb. 1850, auf den höchsten Gotthard-Alpen der Schweiz. 8vo. 22 pp. *Berlin*

† Über d. rothen Meteorstaubfall im Aufang d. Jahres, 1862, in den Gasteiner d. Rauriser Alpen u. bei Lyon. 8vo. 26 pp. *Berlin*, 1862

Ehrmann, Friedrich Ludwig. *Born* 1741, *at Strasbourg; died February* 17, 1800, *at Strasbourg.*

† Description et usage de quelques Lampes à Air inflammable. 8vo. 35 pp. 1 plate. *Strasbourg*, 1780

Gebrauch einer Elekt-Lampe. Aus dem Frans. von ihm selbst übersetzt, mit Anmerk. und einem Anhang. 12mo. *Strasbourg*, 1780

Eimmant. (*Vide* Volckamer.)

Eisenlohr, Otto. *Born September* 3, 1806, *at Carlsruhe; died July* 25, 1853, *at Bad Antogast.*

Untersuchungen über den Einfluss des Windes auf den Barometerstand . . . und die verschiedenen Meteore. 112 pp. *Leipzig*, 1837

Eisenlohr, W. Anleitung z. Ausführung u. Visitation d. Blitzableiter. *Carlsruhe*, 1848

Eisentraut. Disse e corporum electricorum vi attractiva . . . *Herbip.* 1748

† **Ekeberg,** C. G. Beobachtungen der Neigung der Magnetnadel auf einer Reise nach und von Canton 1766 u. 1767. 8vo. 4 pp. (*K. Schwed. Akad. Abh.* xxx. 238.) *Leipzig*, 1768

† Beobachtungen mit dem Neigungscompasse auf einer Seereise von Götheborg nach Canton in China: und von da zurück 1770 u. 1771. 8vo. 15 pp. (*K. Schwed. Akad. Abh.* xxxiv. 254.) *Leipzig*, 1772

† Beobachtungen mit dem Neigungscompass auf einer Seereise nach Canton in China und wieder rückwärts. 8vo. 6 pp. (*K. Schwed. Akad. Abh.* xxxvii. 306.) *Leipzig*, 1775

Ekling. Improvements on Bain's Apparatus, which at the beginning of 1846 was introduced on the line between Edinburgh and Glasgow, &c. (*Described in the Eisenbahnzeitung*, 1847, pp. 99; *Jahr.* 1848, p. 21.)

† **Eklöf,** J. H. Försok att för atskilliga orter i Europa bestämma Norrskenets arliga periodicitet. Foredr för Vet. Soc. d. 5 Dec. 1842. 4to. 17 pp. (*Acta fennica.* ii. 1843.) *Helsingfours* (?) 1842

† **Electric Telegraph Company.** Notice of instantaneous communication with all the principal towns of the kingdom. 4to. 2 pp. (*Cooke, editor.*) *London*, 1850

(*Ten shillings for twenty words: maximum charge.*)

† **Electric Telegraph and Railway Review.**

(*Vide* Lundy, editor.)

† **Electric Telegraph Department in India.** First Report of the Operations, from Feb. 1, 1855, to Jan. 31, 1856. 1856

(*Vide* O'Shaughnessy.)

Electrical Magazine. Vol. i. 8vo. *London*, 1843

(*Vide* C. V. Walker.)

Electrical Society. *Vide* **London Electrical Society,** *and also* **Society of Telegraph Engineers.**

Electrician, The. A weekly Journal of Telegraphy, Electricity, &c. 4to. *London*, 1862

Elias, P. *Born April* 18, 1804, *at Amsterdam.*

Beschrijving eener Maschine ter anmending van het Elektro-magnetism as beweegkracht. *Haarlem*, 1842

† Verslag van eenige op Natuurlijke Magneten genomen proeven. 8vo. 7 pp. *Haarlem*, 1851

(*Overgedrkt uit het Tijdschrift voor de Wisen Natuurkundige Wetenschappen, uitgegeven doorde Erste Klasse van het Kon-Ned. Instituut, Deel.* v. *Bladzijde*, 134.)

Over het vermogen der magneto-elektrische machine. (*Verslagen etc. d. k. Acad. v. Wetenschappen*, xi. 1861.) 1861

Elice, Ferdinando. *Born April* 19, 1786, *at Loano, Genua.*

Lettera sulla niuna influenza del suono delle campane per attrarre il fulmine. *Genova*, 1817

† Saggio sull' Elettricità. 1st Ed. 8vo. 71 pp. *Genova*, 1817

† Account of his Essay on Electricity. Printed 1817, at Genoa. 8vo. 2 pp. (*Phil. Mag.* i. 453.) 1817

† Influenza delle campane sul fulmine. 8vo. 3 pp. (*Bibl. Ital.* xxxii. 423.) *Milano*, 1823

† Saggio sull' Elettricità. Seconda Edizione. 100 pp. 8vo. (*Brugnatelli's copy.*) *Genova*, 1824

(*His plate electric machine for the two Electricities described* (*very shortly*) *at* p. 55. *One side thickly coated with "coralacca"* (*sealing-wax*).) 1824

† Osservazioni sull' Istruzione dei Parafulmini approvata dalla R. Acad. delle Scienze di Parigi il di 23 Aprile 1823 e pubblicata nel 1824. 8 pp. 8vo. *Genova*, 1826

† Lettera del . . F. Elice . . al sig. C. F. 8vo. 3 pp. (*Bibl. Ital.* xlv. 136.) *Milano*, 1827

Note.—On the effects of lightning on the tower of the lighthouse at Genoa, Jan. 4th, 1827.

Istruzione sui Parafulmini. Lettera . . al P. C. Dentone. 8vo. 24 pp. *Genova*, 1839

Istruzioni sui Parafulmini; lettera . . indirizzata al Pittore C. Dentone. Seconda Edizione con aggiunte dell' autore. 8vo. 32 pp. *Genova*, 1841

Lettere al Sig. C. Dentone. 1. Scoperta Scintilla elettrica ottenuta dal caffé e da altri semi 9 Marzo 1842. 2. Elettricità ottenuta da parecchie sostanze 16 Marzo 1842. 8vo. 2 pp. *Genova*, 1842

Nuovo metodo per eccitare l'elettricità collo schioppo, e proposta di un fulmine artificiale. 8vo. 3 pp. *Genova*, 1843

Sull' elettricismo eccitato collo Schioppo. Lettera seconda 18 Marzo 1843. (*To Dentone.*) 8vo. 7 pp. *Genova*, 1843

Osservazioni sui Parafulmini. Luglio 1843 e Nota sulla conducibilità di parecchi metalli per l'elettrico, e proposta di fare le punte dei parafulmini di palladio. 1 Agosto 1843. 8vo. 11 pp. *Genova*, 1843

Notizie elettriche, All' Illust. Sig. Cav. L. Foppiani. 8vo. 12 pp. *Genova*, 1844

† Osservazioni ed esperienze sull' Elettricità All' . . Foppiani. 8vo. 16 pp. (*Brugnatelli's copy.*) *Genova* 1844

† **Elkington et de Ruolz.** Sur les nouveaux procédés introduits dans l'art du Doreur par MM. Elkington et de Ruols. Rapport fait à l'Acad. des Sciences, par M. Dumas. (*Vide* Dumas.) 4to. 1841

Ellery, R. L. T. Monthly Record of results of observations in Meteorology, Terrestrial Magnetism, &c., taken at the Melbourne Observatory during February, 1872. (*From Athenæum*, July 29, 1872.)

† **Ellicott,** Andrew. Account of an extraordinary Flight of Meteors (commonly called Shooting-stars), . . as extracted from his Journal, in a Voyage from New Orleans to Philadelphia. 4to. 1 p. (*Trans. Am. Phil. Soc.*, Old series, vol. vi. part i. p. 28.) *Philadelphia*, 1804

Ellicott, John. *Died in* 1772, *at London.*

Letter on weighing the strength of Electrical Effluvia. 4to. (*Phil. Trans.* 1746, p. 96.) *London*, 1746

† Several Essays towards discovering the laws of Electricity, communicated to the Royal Society by J. Ellicott, and read on the 25th February, 1747, and at two meetings soon after. Read February 25, 1747-48. 4to. 30 pp. (*Phil. Trans.* xlv. 195.) *London*, 1748

(*Latimer Clark's Catalogue says: "To which is prefixed part of a letter from Nollet to Martin Folkes, President of the Academy at Paris.* 8vo. 38 pp.)

Ellinger, A. Beiträge zur Erläuterung d. Vorstellung von Wotterwolken und Blitzen. (*Munchen Denkschr.* 1803-6.) *Munchen*, 1803-6

Ellinger, R. Beiträge üb. d. Einfluss d. Himmels-Körper auf. uns. Atmosph. 2 and 3 Heft. 8vo. *Munchen*, 1814-15-16

Elliott, Captain. Meteorological Observations made at the Observatory at Singapore in 1841. Roy. 4to. 45 pp. *Madras*, 1850

† **Elliot,** C. M. Magnetic survey of the Eastern Archipelago. Read January 16, 1851. 4to. 45 pp. 8 plates. 2 large charts. (*Phil. Trans.* part i. for 1851.) *London*, 1851

† **Elliot,** R. J. On the Magnetic combinations and the action of Selenic Acid on Methyl-Alkohol. Inaugural Dissertation. 8vo. 44 pp. *Gottingen*, 1862

† **Ellis,** F. On Governor Ellis's discovery of the action of cold on Magnetic Needles. 8vo. 2 pp. (*Phil. Mag.* lx. 340.) *London*, 1822

Ellis, J. De Dionæa muscip. ; planta irritabili nuper detecta, ad Linné epistol. a. d. Engl. ubers mit Anmerk, vor J. C. Dr. Schreber. 4to. *Erl*, 1771

† **Elsner,** F. C. L. Die galvanische Vergoldung und Versilberung, sowohl matt als glänzend, so wie die Verkupferung, Verzinnung, Verbleiung, Verzinkung, Bronzirung, Verplatinirung und Vernickelung metallener Gegenstande auf demselben Wege. Nach einigen Erfahrungen bearbeitet. 8vo. 280 pp. 1 plate. 2 figs. *Berlin*, 1843

Neue Erfahrungen bei d. galvan. Vergoldung. *Berol.* 1845

Elvius, Peter (Pehr). *Born* 1710, *at Upsala; died September* 27, 1749, *at* (*A. St.*) *Ekholmsound.*

† Geschichte der Wissenschaften von den Aenderungen boy Abweichung der Magnet-Nadel. 8vo. 12 pp. (*Schwedische Akad. Abhandl.* an. 1746, p. 89, vol. ix.) *Hamburg*, 1746

† Historisk berättelse om electriciteten. 8vo. (*Vetenskaps Acad. Handlinger*, 1747, *and Reuss*, iv. 346.) *Stockholm*, 1746

Geschichte der Wissenschaften. Von der Elektricität. 8vo. 7 pp. (*K. Schwed. Akad. Abh.* ix. 179.) *Hamburg*, 1746

Elvius, Peter (Pehr).—*continued.*

Historisk berättelse om andringar i magnetnalens missvisning. 8vo. (*Vetenskaps Acad. Handlinger*, 1747.) *Stockholm*, 1747

† Lage von Gothenberg durch astronom. Beobachtungen bestimmt von P. E. 8vo. 16 pp. (*K. Schwed. Akad. Abh.* x. 300, *Abweichung des Magnets*, p. 311.) *Hamburg and Leipsig*, 1748

† **Emmett**, J. B. On an Electrical Phenomenon. 8vo. 3 pp. (*Phil. Mag. or Ann.* v. 170.) *London*, 1829

Emory, E. H. Observations, astronomical, magnetic, and meteorological, made at Chagres and Gorgona, Isthmus of Darien, and at the city of Panama, New Grenada. 4to. *Cambridge* (*U. S.*), 1850

† **Emory**, W. H. Astronomical, Magnetical, and Meteorological Observations made at Panama. Communicated by Bond, August 8, 1849. (*Mems. American Acad.* New series, v. part i. p. 1.) 4to. 24 pp. *Boston*, 1853

Enciclopedia Circolante Ital. e Straniera. . . . Progressi, scoperte, ec. Foglio periodico settimanale.

Encke. Über d. Bestimm d. Längen-Unterschiedes zwiche d. Sternwart. v. Brüsel und Berlin abgeleitet auf telegraph. Wege. 4to. 67 pp. (*Berlin Acad.* 1858.) *Berlin*, 1858

† **Encke**, J. F. Über die magnetische Declination in Berlin. 4to. 21 pp. (*Abhandl. Akad. Berlin*, 1857.) *Berlin*, 1857

Encontre, Daniel. *Born* 1762, *at Nismes; died Sep.* 16, 1818, *at Montpellier.*

Communication, &c., of the "Relation de la chute de deux Aérolithes par MM. Pages et D'Hombre Firmas." 8vo. (*Montpellier Acad. Rec. des Bulletins*, iii. 52.) *Montpellier*, 1809

Encyclopædiæ and Cyclopædiæ.

Encyclopædia of British Arts. (*Vide* Barlow, B.)
British Cyclopædia.
Encyclopædia Britannica.
Encyclopædia Metropolitana.
The Cyclopædia by Rees
British Encyclopædia, by Nicholson.
English Enclyclopædia.
Iconographic Encyclopædia, I.
London Encyclopædia, I.
Nichols' Cyclopædia of the Physical Sciences.
Penny Cyclopædia.
Chambers's Cyclopædia.
Enclyclopædia of Edinburgh.
Brewster's Encyclopædia.

Encyclopædia Britannica.

7th edition, edited by Napier. 4to. *Edinburgh and London*, 18—
Articles. Aurora-borealis, by , vol. iv.
Electricity, by Sir D. Brewster, vol. viii.
Voltaic Electricity, by Sir D. Brewster, vol. xxi.
Magnetism, by Sir D. Brewster.

8th edition, edited by Trail. 4to. *Edinburgh and London*, 1853-61
Articles. Electricity, by Sir D. Brewster, vol. viii.
Aurora Borealis, by R. Jameson, vol. iv.
Beccaria, by Thomas Young, vol. iv.
Chemistry, by William Gregory, vol. vi
Franklin, B., by A. Nicholson, vol. x.
Magnetism, by Sir D. Brewster, vol. xiv.
Meteorology, by Sir John Herschell, vol. xiv

Encyclopædia Britannica—*continued.*

Articles. Sir Isaac Newton, by Sir D. Brewster, vol. xvi.
Polar Regions, by Sir T. Richardson, vol. xviii.
Telegraph, by W. Thomson, vol. xxi.
Voltaic Electricity, by Sir D. Brewster, vol. xxi.
Terrestrial Magnetism, by Sir John Herschell.

Encyclopædia of Edinburgh. Conducted by D. Brewster. Part i. (*Phil. Mag.* xxvi. 146.) *Edinburgh*, 1808

Encyclopædia Londinensis.

Encyclopédie Méthodique. Article Paratonnerre. 1782

Encyclopædia Metropolitana. Edited by Smedly and Rose. 59 parts, each 21s., 1817-45; bound in 30 vols. 4to. *London*, 1849

The Divisions, containing Pure and Mixed Sciences, with 125 plates, Treatises, by Airy, Barlow, Lardner, Phillips, Senior, Herschell, Daubeny, Maurice, and others. 6 vols. 4to. 1829-36

Pure and Mixed Sciences, containing Grammar, Logic, Rhetoric, Geometry, Arithmetic, Algebra, Theory of Numbers, Trigonometry, &c., &c., Mechanics, Hydrodynamics, Pneumatics, Optics, Astronomy, Magnetism, Electro-Magnetism, Electricity, Galvanism, Heat, Light, Chemistry, Sound, &c., by the following authors, Barlow, Capt Kater, Herschell, Linn, Roget. 2 vols. 4to. plates. (*Spon's Catalogue*, 1865.) 1829

Experimental Philosophy. 4to. Vol. ix. *London*, 1848

Encyclopædie der Physik. (Karsten?)

Encyklopadie, Allgemeine, der Physik. Bearbeitet von C. W. Brix, G. Decher, F. C. O. v. Feilitzsch, F. Grashof, F. Harms, H. Helmholtz, G. Karsten, H. Karsten, C. Kuhn, J. Lamont, J. Pfeiffer, E. E. Schmid, F. Schulz, L. Seidel, G. Weyer, Herausgegeben von Gustav Karsten. 8vo.

1. Band. Allgemeine Physik von G. Karsten, F. Harms und G. Weyer. Pp. 449—560 c. figg. xyl.
19. Band. Fernewirkungen des galvanischen Stroms, von F. v. Feilitzsch. Pp. 641—752 c. figg. xyl.
20. Band. Angewandte Electricitätslehre von C. Kuhn. Pp. 1009—1104 c. figg. xyl.

Ende, Ferdinand Adolphe. *Born* 1760, *at Celle; died about* 1817, *at Mannheim.*

Über Massen und Steine die aus dem Monde auf d. Erde gefallen sind. 4to. (*Gilbert's Ann.* xviii.) *Braunschweig*, 1804

Endter, J. A. Theatrum sympatheticum auctum; exhibens varios auctores de Pulvere sympathetico quidem Digbeum, Straussum, Papinicum et Mohyum: de unguento vero amatorio: Goclenium, Robertum, Helmontium, &c. . . . 4to. 722 pp. *Norimbergæ*, 1662

Engel. Bibliotheca Selectissima sive Catalogus Librorum in omni genere Scientiarum Rarissimorum. 8vo. *Bernæ*, 1743

Englefield, Sir H. C. Some particulars respecting the Thunderstorm at London and in its vicinity on the 31st of August, 1810. 8vo. 4 pp. (*Phil. Mag.* xxxvi. 349.) *London*, 1810

English Cyclopædia.

Edited by Charles Knight. 8vo. 22 vols. *London*, 1856-62
Arts and Sciences, 8 vols.
Biography, 6 vols.
Geography, 3 vols.
Natural History, 4 vols.
Synoptical Index, 1 vol.

† **Ennemoser,** J. Der Magnetismus, &c., nach der allseitigen Beziehung seines Wesens, seiner Erscheinungen, Anwendung, und Enträthselung, in einer geschichtlichen Entwickelung von allen Zeiten und bei allen Völkern wissenschaftlich dargestellt. 781 pp. 8vo. *Leipzig*, 1819

† Der Magnetismus im Verhaltnisse zu Natur und Religion. 8vo. 546 pp. *Stuttgart und Tubingen*, 1842

Enner, Von. Über die Anwendung der Reibungs-Electricität zum Zünden von Sprengladungen. 4to. 3 plates. (*Sitzungsber der . . . d. k. Akad. d. Wissensch. zu Wien*, xxi. 85-111.) *Wien*, 1856

† **Enschede.** Dissertatio de calore qui excitatur de electricitate. 4to. 79 pp. *Lugd. Bat.* 1834

Entrecasteaux, J. A. B. Voyage à la recherche de La Pérouse rédigé par de Rossel. The Atlas rédigé par Beautemps Beaupré. 4to. 2 vols. Atlas of 40 plates. *Paris*, 1808

Epoandro Napili ossia **Leonardo Papini.** Dissertazione (elettricità.) *Faenza*, 1752

Epp, Franz Xavier. *Born December* 25, 1789.

Problemata electrica. 8vo. *Monachii*, 1773

† Abhandlung von dem Magnetismus der naturlichen Electricität. 8vo. 128 pp. 2 plates. *Munchen*, 1777

† **Epple,** B. Die electrische Telegraphie im Allgemeinen und ihre Anwendung hauptsächlich im deutsch-österreichischen Telegraphen-Verein, in Belgien, Dänemark, Frankreich, dem italienischen Staaten der Schweiz, &c. 12mo. 134 pp. 7 plates. *Kempten*, 1855

† **Erckmann,** Jules. Etablissement des lignes électriques sous-marines sans câbles sous-marins. 8vo. 14 pp. *Paris*, 1861

Considérations sur l'origine de l'Electricité. Mémoire présenté à l'Académie des sciences de Paris. 4to. 11 pp. *Paris*, 1866

† **Erckmann** et **Agmini.** La lithomalakie électrique, nouvelle méthode pour ramollir et rendre friable les pierres, calculs et gravelle contenus dans la vessie. 8vo. 11 pp. *Paris*, 1863

† **Erdman** mit **Richter.** Dritter Bericht über Elektrotherapie von A. Erdman mit Zusätzen von H. E. Richter. 4to. 29 pp. (*Med. Jahrb. Sep. Abd. Dresden.*)

(*Vide* also Richter and Erdman.)

Erdmann. Die Anwendung der Electricität in der Medecin. 3rd Aufl.

† Nachträgliche Bemerkungen zur Abhandlung des Hrn. Prof. v. Kobell über Vervielfältigung von Zeichnungen durch Galvanismus Seil 151. 8vo. 2 pp. 1 plate.

† **Erdmann,** B. A. mit **Duchenne.** Die örtliche Anwendung der Elektricität in der Physiologie, Pathologie, und Therapie mit Zugrundlegung von Duchenne de Boulogne de l'electrisation localisée, &c. . . . Zweite vielf. umgerb. Auflage. 2nd edition. 8vo. 266 pp. Cuts. *Leipzig*, 1858

Erdmann, J. F. von. Utrum aqua per electricitatem columnæ a cel. Volta in ventæ in elementa sua dissolvatur? *Vitеb*, 1802

Description d'un nouvel appareil galvanique très-actif. 8vo. (*Journ. de Chim. de Van Mons*, No. xii. p. 283.) *Bruxelles*, 1802

Uber d. Wasserzersetzung durch d. Volta'schen Säule. 8vo. (*Gilbert's Ann.* xi. 1802.) *Leipzig*, 1802

Galvan-elektrische und medicin Versuche 8vo. (*Gilbert's Ann.* xi. 1802.) *Leipzig*, 1802

Galvanische Versuche im Wiener Irrenhause angestellt. (*Horn's Arch. f. medecin Erfahr*, vi. 1804. 1804

Erfurt, Academia Moguntina Scientiarum. Acta, an. 1776-1795. 12 vols. 4to. *Erfurti*, 1777-1796

Nova acta, ab an. 1797. 4 vols. 8vo. *Erfurti*, 1799-1809 ?

Erman, Georg Adolph. *Born May* 12, 1806, *at Berlin.*

† Essai sur la direction et intensité de la force magnétique à St. Petersbourg. Lu à l'Acad. le 11 Juin, 1828. 4to. 12 pp. (*Mém. des Sav. étrang.* t. i.) 1828

Magnet Beobb in Russland. 8vo. (*Poggend. Ann.* xvi. and xvii.) *Leipzig*, 1829

† Bericht an. d. Kön. Acad. . . . über die Fortsetzung seiner magnetischen Beobachtungen in Russischen Assien, durch den grossen und atlantischen Ocean. 8vo. 38 pp. 1 map. *Berlin*, 1830

Gestalt d. erdmagnet. Linien. 8vo. (*Poggend. Ann.* xxi.) *Leipzig*, 1831

Magnet. Declinat. Inclinat. und Intensität von Berlin. 8vo. (*Poggend. Ann.* xxi.) *Leipzig*, 1831

Reise um die Erde, durch Nord-Asien und d. beiden Oceane, in d. J. 128-29-30 ausgefürht. In e. hist. und e. physikal. Abtheil. dargest.
Abthl. 2. Physikalische Beobachtungen, 2 Bde:—
Bd. I. Ortsbestimmungen und Declinations Beobachtungen auf d. festen Lande. 8vo. *Berlin*, 1835
Bd. II. Inclinationen und Intensitäten Declinations Beobachtungen auf d. See. Periodische Declinations veranderungen. 8vo. *Berlin*, 1841

Declination zu Irkutsk und Einfluss e. Erdhebens darauf. 8vo. (*Poggend. Ann.* xxxix.) *Leipzig*, 1836

De inclinat. virium magnet. mensura. 4to. *Berol.* 1839

Über d. Aufstellung eines Inclinat. auf einem Schiffe. (*Astr. Nachr.* xvi.) 1839

Über Sternschnuppenbeobachtungen. (*Astr. Nachr.* xvii.) 1840

Archiv für wissenschaftliche Kunde von Russland. Herg. v. A. Erman. 8vo. *Berlin*, 1841

Vergleich seiner Magnet Beob. mit d. Theorie d. Erdmagnetismus von Gauss. (*Astr. Nachr.* xix.) 1842

On the continuance of magnetical and meteorological Observations. 8vo. (*Report Brit. Assoc. for* 1845.) *London*, 1845

Magnet. Declinat. Inclinat, u. Intensität, v. Berlin. 8vo. (*Poggend. Ann.* lxviii.) *Leipzig*, 1846

Magnet. Beobachtungen und geogr. Ortsbestimmungen daselbst (*i.e.*) following Bemerkk üb. d. Herschel'sche Actinometer usw. (*Astr. Nachr.* xxxv.) 1853

Erman, Paul. *Born February* 29, 1764, *at Berlin; died October* 11, 1851, *at Berlin.*

Uber d. elektroskop. Phœnomene d. Volta'schen Säule. 8vo. (*Gilbert's Ann.* viii.) *Leipzig*, 1801

Sur les phénomènes électrometr. de la colonne de Volta. 8vo. *Paris*, 1801

Über d. elektroskop. Phœnomene d. Volta'schen Saule. 8vo. (*Gilbert's Ann.* x.) *Leipzig*, 1802

Versuche e physischen Theorie d. Volta'schen Saule. 8vo. (*Gilbert's, Ann.* xi.) *Leipzig*, 1802

Skeptische Beiträge z. atmosphäri Elektrometrie. (*Gilbert's Ann.* xv.) *Leipzig*, 1803

Über d. Entlad d. Volta'schen Säule durch Vermittlung e. beträchtl. Strecke eines Stroms. 8vo. (*Gilbert's Ann.* xiv. 385.) *Leipzig*, 1803

Über d. fünffache Verschiedenheit der Körper in Rucksicht auf galvanisches Leitungsvermögen. Gekrönnt vom National Institut. . . .) 8vo. (*Gilbert's Ann.* xxii.) *Leipzig*, 1806

Erman, Paul.—*continued.*

Über elektrish. geographische Polarität, permanente elektrische Ladung, und magnetisch-chemische Wirkungen. 8vo. (*Gilbert's Ann.* xxvi.) *Leipzig*, 1807

† Extract of a memoir upon two new classes of Galvanic Conductors. From Ann. de Chim. lxi. 713. 8vo. 8 pp. (*Phil. Mag.* xxviii. 297.) *London*, 1807

Über muscular-Contraction. 8vo. (*Gilbert's Ann.* xl.) *Leipzig*, 1812

† Versuch einer Zurückführ d. mannigfalt. Erscheinungen d. elektr. Reizung auf einen einfachen chemisch-physischen Grundsatz. (Vorgelesen 20 Mai, 1813.) 4to. 16 pp. (*Abhandl. Berl. Acad.* 1812-13.) *Berlin*, 1812

† Über d. wechselseit. Einfluss von Elektricität u. Wärmethätigkeit. 4to. 11 pp. (*Abhandl. Berl. Akad.* 1814-15.) *Berlin*, 1814

† Bemerk. üb. d. Verhältniss d. unmagnet. Eisens zur tellurische. Polaritat. Vorgelesen, 1 Dec. 1814. 4to. 26 pp. (*Abhandl. Berl. Akad.* 1814-15.) *Berlin*, 1815

† Vorläuf. Bemerkk. über d. durch blosse geomtr. Ungleichheit der Berührungsflächen erregte elektr. Spannung. Vorgelesen den 3 August, 1817. 4to. 12 pp. (*Abhandl. Berl. Akad.* 1816-17.) *Berlin*, 1817

† Über e. eigenthümlich reciproke Wirkung d. zwei entgegengesetzten elektr. Thätigkeiten. Vorgelesen 11 Feb. 1819. 4to. 26 pp. (*Abhandl. Berlin Akad.* 1818-19.) *Berlin*, 1819

† Üb. e. eigenthümlich reziproke Wirkung der 2 entgegengesetzt. electr. Thatigkeiten. Vorgelesen am 11 Feb. 1819. 4to. 26 pp. 1 plate. (*Abhandl. Berlin Acad.* 1818-19, p. 351.) *Berlin*, 1818-19

† Umrisse zu den phys. Verhältnissen des von Ærsted entdekten elektrochemischen Magnetismus skizzirt. 8vo. 112 pp. 1 plate. *Berlin*, 1821

Merkwürd. magnet. Beobachtung. 8vo. (*Poggend. Ann.* ix.) *Leipzig*, 1827

† Über die magnetischen Verhaltnisse der Gegend. von Berlin. ("Zusammengetragen aus mehreren den Jahreen, 1826-28 angehörigen Berichten.") 4to. 59 pp. 2 plates. *Berlin*, 1828

† Beiträge zur Monographie des Marekanit Turmalin und brasilianischen Topas in Bezug auf Elektricität. 4to. 22 pp. (*Abhandl. Berlin Akad.* 1829.) *Berlin*, 1829

Der 3 August u. d. Granit-Schale-zur öffentl. Sitzung d. Akad. 4to. *Berlin*, 1831

† Erzeug. von Elektromagnetismus durch blosse Modification der Vertheilung d. Polarität in einem unbewegt Magnet. Gelesen 25 Oct. 1832. 4to. 16 pp. (*Abhandl. Berlin Akad.* 1832.) *Berlin*, 1832

On the influence of Friction upon Thermo-Electricity. 8vo. (*Report Brit. Assoc.* 1845.) *London*, 1845

† Gedächtnissrede auf P. Erman (von) Du Bois-Reymond. 4to. 27 pp. (*Gehalten in d. K. Akad. zu Berlin*, 7 *Juli*, 1853.) *Berlin*, 1853

Erman, P. and Marechaux. Über d. trockne Volta'sche Säule. 8vo. (*Gilbert's Ann.* xxii.) *Leipzig*, 1806

† **Ermerins, Jacob.** De lege repulsionis electricæ. (Thesis.) 4to. 54 pp. 2 tables. *Lugd. Bat.* 1827

† **Ersch, J. S.** Handbuch der deutschen Literature, seit der Mitte des 18 Jahrhund. bis auf die neueste Zeit. . . . des 2 Bands 1 des ganz Werke fünfte Abtheilung 1st edition. 8vo. *Amsterdam*, 1813

Handbuch . . . neue Ausg. . . . 4 Th. in 8 Bde. 8vo. *Leipzig*, 1822-40

† Litteratur der Mathematik, Natur-und-Gewerbskunde, &c. . . . Neue fortgesetzte Ausgabe von F. W. Schweigger-Seidel. 8vo. 1739 pp. *Leipzig*, 1828

Eschenbach, Christian Gotthold. *Born November* 24, 1753, *at Leipzig; died November* 10, 1831, *at Leipzig.*

II. Ant. Brugman's . . . Beobachtungen über die Verwandschaften des Magnets. a. d. latin. über. und mit einigen Anmerkungen vermehrt. 8vo. 167 pp. *Leipzig*, 1781

Eschenmayer, Carl Adolph von. *Born July* 4, 1770, *at Neurenberg, Wurtemberg; died November* 17, 1852, *at Kirchheim unter Teck.*

Versuch die Gesetze magnetischer Erscheinungen aus Sätzen der Naturmetaphysik mithin a priori zu erklären entwickeln. 8vo. *Tubingen*, 1798

† Versuch d. scheinb. Magie des Thier Magnetismus aus phisiologischen und psychischen Gesetzen zu erklären. 8vo. 180 pp. *Stuttgart and Tubingen*, 1816

Eschke, E. A. Galvanische versuche. *Berlin*, 1803

Erfahrungen uber den Galvanismus. 8vo. *Berlin*, 1803

L'Esprit des Journaux. Contains articles on Thunder, &c., as *e.g.* pour October, 1721, pp. 132 and 333, &c.

Espy, James Pollard. *Born May* 9, 1786, *at Washington, U.S.; died January* 24, 1860, *at Cincinnati, U.S.*

On Waterspouts. (*Franklin Institut.* xvii. 1836.)

Deductions from observations made and facts collected on the path of the Brunswick Spout of June 19, 1835. 4to. (*Transactions of the American Philosophical Society*, New series, vol. v.) *Philadelphia*, 1837

The Philosophy of Storms. 8vo. 552 pp. *Boston*, 1841

Esser, Ferd. Abhandl. üb. Blitzableiter. 8vo. *Munster*, 1785

† **Etenaud,** A. Guide des directeurs de station et des stationnaires chargés de bureaux de l'Administration des Lignes Télégraphiques. 8vo. 252 pp. *Le Puy*, 1860

† **Eton,** R. Description of a double exciting cyliuder Electrical machine. Letter to the Editor. 8vo. 2 pp. 1 plate. (*Annals of Electricity*, vii. 81.) (*Roget's copy.*) *London*, 1841

Ettingshausen, A. von. Über d. Einricht. u. d. Gebrauch seiner magnetoelektr. Maschine. (*Bericht über d. Naturforscher-Versammlung zu Prag*, 1837.) *Prag*, 1837

Über einen Satz von Gron das elektr. Potential betreffend. (*Sitzungsber. d. Wiener Akad.* vol. i. 1848.) *Wien*, 1848

Anfangsgründe der Physik. 8vo. with 150 woodcuts. *Wien*, 1860

Ettingshausen mit **Baumgartner.** Zeitschrift fur Physik und Mathematik. x. Bde. 8vo. *Wien*, 1826-32

Euler, Johann Albrecht. *Born November* 27 (A. St.), 1734, *at St. Petersburg; died September* 6 (A. St.), 1800, *at St. Petersburg.*

Théorie de l'inclinaison de l'aiguille magnétique confirmée par des expériences. 4to. (*Mémoires de Berlin*, 1755, p. 117.) *Berlin*, 1755

Des cerfs volants. 4to. (*Mémoires de Berlin*, 1756.) *Berlin*, 1756

† Disquisitio de causa physica electricitatis ab Acad. Scient. Imp. Petrop. praemio coronata . . . die Sept. 6, 1755: una cum aliis duabus dissertationibus de eodem argumento. 4to. 28 pp. *Petropoli*, 1757

Recherches sur la cause physique de l'électricité. 4to. *Mémoires de Berlin*, 1757, p. 125.) *Berlin*, 1757

Nachr. v. einer magnet. Sonnenuhr. 4to. (*Schr. Kurlayrisch Acad.* v. 1768.) *Munchen*, 1768

† **Euler, Frisi et Beraud.** Dissertationes selectæ. Jo. Albi. Euleri, Pauli Frisii, et Laurentii Beraud, quæ ad Imperialem Scientiarum Petropolitanam Academiam an. 1755 missæ sunt, cum Electricitatis causa, et theoria, premio proposito, quæreretur. 8vo. 204 pp. 1 plate. *Petropoli et Lucæ*, 1757

Euler, Leonhard. *Born April 15, 1707, at Basle; died September 7, 1783, at St. Petersburg.*

Théorie nouvelle de l'aimant. 4to. (*Pièces de Prix de l'Académie de Paris.*) *Paris*, 1744

Recherches physiques sur la cause de la queue des comètes, de la lumière boréale et de la lumière zodiacale. 4to. (*Mémoires de Berlin*, an. 1746, p. 117.) *Berlin*, 1746

Opuscula varii argumenti. Nova Theoria Magnetis. 3 vols. 4to. *Berlin*, 1746 and 1751

Opuscula varii argumenti. Tom. iii. 4to. *Berlin*, 1746-50-51

Dissertatio de magnete. 4to. (*Pièces de Prix de l'Académie des Sciences de Paris*, v. *Mém.* ii.) *Paris*

De observatione inclinationis magneticæ dissertatio. (*Pièces de Prix de l'Académie de Paris*, v. *Mém.* ix. p. 63.)

Poggendorff (i. 702) *says*, "*Sur l'inclinaison de l'aimant*, 1743, *Gekrönt von d. Paris Académie über in deren Pièces de Prix gedruckt.*"

Recherches sur la déclinaison de l'aiguille aimantée. 4to. (*Mémoires de Berlin*, an. 1757, p. 175.) *Berlin*, 1757

Opera posthuma mathematica et physica anno 1849 detecta quæ ed. P. H. et Nic. Fuss. 2 vols. 4to. *Petropoli*, 1862

Corrections nécessaires pour la théorie de la déclinaison magnétique proposée dans le vol. xiii. (1757) des Mémoires de l'Académie. 4to. (*Mémoires de Berlin*, an. 1766, p. 213.) *Berlin*, 1766

Lettres à une Princesse d'Allemagne sur quelques sujets de physique et de philosophie. 3 vols. 8vo. *St. Petersburg*, 1768-72

Breife. 8vo. *Leipsig*, 1769

Breife. 8vo. *Leipsig*, 1774

Conjectura circa naturam aeris pro explicandis phænomenis in atmosphæra observatis. 4to. (*Nov. Act. Petrop.* iii. part i. 1779.) *Petropoli*, 1779

Letters translated by Hunter, ii. 34. 8vo. 2 vols. *London*, 1795

† Portrait. Lithographie d'après Mdlle. Morice par E. Sandrier.

Euler, D., and J. Bernoulli and Dutour. Pièces de Prix de l'Académie de Paris. Boussoles. 4to. *Paris*, 1748

† **Eustis, H. L.** The tornado of August 22, 1851, in Waltham, West Cambridge, and Medford, Middlesex County, Massachusetts. 4to. 8 pp. with map. (*Mems. American Academy*, New series, v. pt. i. p. 169.) *Boston*, 1853

Evans. Catalogue of engraved British Portraits. 8vo. *London*

Evans, T. S. On the laws of Terrestrial Magnetism in different latitudes. 8vo. 5 pp. (*Phil. Magazine*, xlix. 3, p. 95.) *London*, 1817

† **Evans, F. J.** Chart of the lines of equal Magnetic declination in the South Polar regions and in the Pacific Ocean. Epoch 1859. No. ii. Fol. 1 sheet map, coloured.

Taken from the Admiralty charts and completed . . . according to the theory of Gauss. *London*

† Chart of the lines of equal Magnetic declination in the North Polar regions and in the Atlantic and Indian Oceans. Epoch 1859. No. i. Fol. 1 sheet map, coloured.

Taken from the Admiralty charts and completed by Mr. F. J. Evans according to the theory of Gauss. *London*, 1859

Evans, F. J.—*continued.*

† Chart of the Curves of equal Magnetic variation, 1858. Sheet 3 ft. 4½ in. by 2 ft. 2 in. *London*, 1859

Reduced to that epoch from numerous observations, made by officers of H.M. Navy, between 1850 *and* 1858; *as also from various magnetic surveys, undertaken of late years by the British and foreign Governments.* (*The observations at sea being corrected for the effects of the ship's iron.*)

† An elementary Manual for the deviations of the Compass in iron ships. 8vo. 143 pp. 5 plates. *London*, 1870

† Evans and Smith. Admiralty Manual for ascertaining and applying the deviations of the Compass caused by the iron in a ship. Published by order of the Admiralty. 2nd edition. 8vo. 108 pp. 6 separate engravings. *London*, 1862

† Admiralty Manual for ascertaining and applying the deviations of the Compass caused by the iron in a ship. Published by order of the Admiralty. 8vo. 166 pp. *London*, 1863

Über die Deviationen des Compasses, welche durch das Eisen eines Schiffes verursacht werden. Nach dem Englischen deutsch bearbeitet von F. Schaub. 8vo. 152 pp. 6 plates. *Wien*, 1864

Exhibition, London, 1851 and 1862. Official, descriptive, and illustrated Catalogue of the Great Exhibition of 1851, together with the reports of the Jurors. 6 vols. Royal 8vo. Illustrated with hundreds of fine woodcuts. *London*, 1851

Official, descriptive, and illustrated Catalogue. 3 vols. Royal 8vo. Illustrated with hundreds of fine woodcuts. *London*, 1851

Official Catalogue, illustrated. 4 vols. 8vo. *London*, 1852

Ditto, with reports. 6 vols. 4to. *London*, 1852

Reports of the Juries on the subjects of the thirty classes into which the Exhibition was divided. 8vo. *London*, 1852

Official illustrated British Catalogue. 2 vols. 8vo. *London*, 1862

Official illustrated Foreign Catalogue. 2 vols. 8vo. *London*, 1862

Official illustrated Catalogue of the Exhibition of 1862, comprising both the English and Foreign divisions. 4 vols. Royal 8vo. *London*, 1862

The illustrated Catalogue of the British Industrial department of the International Exhibition of 1862. 2 vols. Royal 8vo. *London*, 1862

Illustrated Catalogue. 3 vols. Royal 8vo. *London*, 1862

A Cyclopædia of Machinery represented at the International Exhibition of 1862. Edited by D. H. Clarke. Royal 8vo. *London*, 1864

Reports of the Juries of the International Exhibition of 1862. Royal 8vo.

† Exposition universelle de 1867. Rapports publiés sous la direction de M. Mich. Chevallier. 8vo. tom. ii. and viii. *Paris*, 1868

Exleben. Au Prof. Lichtenberg, die seltsame Wirkung eines Wetterstrahls auf ihn betreffend. 8vo. (*In Cotting. Mag.* J. i. 1780, St. i. pp. 104-8.) *Göttingen*, 1780

† Anfangsgründe der Naturlehre mit Verbesser, &c. v. Lichtenberg. 6th edition. 12mo. *Göttingen*, 1794

Exley, T. Principles of Natural Philosophy, or a new theory founded on gravitation and applied in explaining the properties of matter and the phænomena of chemistry, electricity, galvanism, magnetism, and electro-magnetism. 8vo. 478 pp. *London and Bristol*, 1829

Eyck, S. S. (Van ?). Over de magnetische proeven van Oersted. (*Allgem. Konst-en Letterbode*, 1821, and in *Bibl. Universelle*, 1821.) 1821

Mémoire sur l'électro-magnétisme. 1822

Over het electromagnetismus. *Harlem*, 1823

Eyck. (*Vide* **Tan, or Ten Eyck.**)

Eydam, Immanuel. *Born February* 20, 1802, *at Jena; died February* 9, 1847, *at Berka.*

† Die Erscheinungen der Electricität und des Magnetismus in ihrer Verbindung mit einander. 8vo. 3 plates. *Weimar*, 1843

Eynard. Mémoire sur l'électrophore. *Lyon*, 1804

Mémoire sur les théories de l'électricité. *Lyon*, 1805

Eytelwein, J. A. (*Vide* **Gilly and Eytelwein.**

F.

F, E. (*Vide* Anon. Meteorolog. Phen.) 1821

Fabbroni, A. Vitæ Italorum doctrina excellentium. 20 vols. 8vo. *Pisis et Lucæ*, 1778 to 1805

Fabbroni, Giovanni Valentino M. *Born Feb.* 13, 1752, *at Florence; died Dec.* 17, 1822, *at Florence.*

† Articolo di lettera . . . sopra i prodigi di Pennet. . . . . 8vo. 3 pp. (*Ann. di Chim. di Brugnatelli*, ii. 316.) *Pavia*, 1791

Dell' azione chimica dei Metalli nuovamente avvertita. (*Atti della Reg. Soc. Economica di Firenze, ossia dei Georgofili*, vol. iv. p. 349, 1801.) *Firenze*, 1801

Memoria intorno alla causa della termoossidazione dei diversi metalli, mediante il loro contatto; letta alla Soc. dei Georgofili di Firenze. 1793

Sur l'action chimique de différents métaux entr'eux à la température de l'atmosphère, et sur l'explication de quelques phénomènes galvaniques. (*From Ital. Soc. Mem.* xx. p. 26; *Lombardi's Elogio di Fabbroni.*) *Paris*, 1799

† Riflessioni sulle pietre cadute del Cielo. . . Lettera à Brugnatelli. 8vo. 4 pp. (*Ann. di Chim. di Brugnatelli*, xxi. 277.) *Pavia*, 1802

† Lettera al Conte Niccolò Da Rio di Padova (del 18 Maggio, 1805). 8vo. 1 p. (*Giorn. dell' Ital. Lettera del Dal Rio*, ix. 97.) *Padova*, 1805

Sulla tromba galvanica. 4to. (*Giorn. di fisica*, iii. 1810.) *Pavia*, 1810

† Elogio del Cav. Giovanni Fabbroni scritto da A. Lombardi. 4to. 30 pp. (*Mem. Soc. Ital.* xx. p. 1.) *Modena*, 1828

Fabre et Kunneman. Machines élect. en caoutchouc. (*From* Du Moncel.)

Fabré-Palaprat, et La Beaume. Du Galvanisme appliqué à la médecine, &c. . . . Avec des notes sur quelques remèdes auxiliaires, par La Beaume. . . . † trad. de l'anglais et précédé de remarques, &c. . . . par R. B. Fabré Palaprat. 8vo. 438 pp. *Paris*, 1828

Fabricius, F. Dansk Bogfortegnelse for Aarene 1841-1858. 4to. 252 pp. *Kiobenhavn*, 1861

Fabri, Honoré (Honoratus). *Born* 1606(7), *at Le Bugey, Diöcese Belley; died Mar.* 9, 1688, *at Rome.*

Physica seu scientia rerum corporearum. . . . 4to. *Lugd.* 1669-1671

Fabri, Ruggero. Osservazioni microscopiche della scintilla elettrica. 4to. (*Atti d. Pont. Accad. dé Nuovi Lincei*, p. 16, an. 1858.) *Roma*, 1858

Sulla induzione elettrostatica. (*Atti d. Pont. Accad. dé nuovi Lincei*, p. 405, an. 1858.) *Roma*, 1858

Fabris, Nico. *Born* 1739; *died* 1801.

"Erfand eine Uhr ohne Rader und Gewichte, durch einen Magnet bewegt." (*Poggendorff*, i. 714.)

Fabrizio d'Acquapendente. De visione, voce, et auditu. (*Poggendorff*, i. 714.) *Venet.* 1600

Fabroni, A. d'Arezzo. On shocks received from a (live) Cat. (*In the Anthologia*, 1830, p. 173.) 1830

Fabroni. Sur l'irritation métallique.

See (*Hist. p.* 229) *gives an* "*Extrait de l'ouvrage de Fabroni sur l'irritation métallique*," *but no date or place.*

Fahlberg, Samuel. *Born about* 1755, *in Norway; died after* 1834, *at Barthélemy?*

Anmarkningar rorande oroanen 1792 pa. On St. Barthelemi, saint barometerns och electricitetens förhallande vid detta tillfalle. (*Vetensk Acad. Nya Handl.* an. 1794, s. 275.) *Stockholm*, 1794

Bowkrifning ofver elektriska alen Gymnotus electricus. (*Vet. Acad. Nyr. Handl.* 1801.) *Stockholm*, 1801

Fait. (*Vide* McFait.)

Falconer, W. Observations on the knowledge of the Ancients respecting Electricity. . . . (*Mem. of the Society of Manchester*, iii. 278.) *Manchester*

† Osservazioni sulle Notizie degli Antichi intorno alla elettricità del . . . Falconer comunicata dal Dr. Percival. (*Translation.*) 4to. 9 pp. (*Opus. Scelt.* xiv. 274.) *Milan*, 1791

Falconieri. (*Vide* Landi and Falconieri.)

Falconet, C. Dissertation historique et critique sur ce que les anciens ont cru de l'Aimant. 4to. (*Mém. de littérature tirés des Registres de l'Acad. Rle. des Inscrip. . . . depuis* 1711 *and* 1747, tom. iv. *Paris*, 1746.) *Paris*, 1746

Sur les bétyles. 4to. (*Acad. des Inscrip.* xii. *Mém.* p. 515, *et seq.*) *Paris*

Fantasti, G. C. Opinione sopra la cagione della morte della Sig. Contessa Cornelia Zangari nc' Bandi (Cesenate). Esposta in una lettera al Sig. Marchese Don Garzia di Toledo. 8vo. *Verona*, 1731

Faraday, Michael. *Born Sept.* 22, 1791, *at Newington, London; died Aug.* 25, 1867, *at Hampton Court, Middlesex.*

† Description of an Electro-Magnetical Apparatus for the exhibition of Rotatory Motion. 8vo. 9 pp. 1 plate. (*Arago's copy.*) *London*, 1822

† Chemical Manipulation, being Instructions to Students in Chemistry. 8vo. 1830

† On Light and Phosphorescence. Experiments of Pearsall. Restoration of phosphorescent power by Electrical discharges to bodies which had been deprived of it by Calcination. 8vo. 1 p. (*Phil. Mag.* ix. 318.) *London*, 1831

On the Magneto-Electric Spark and Shock, and on a peculiar condition of Electric and Magneto-Electric Induction. 8vo. (*Phil. Mag.* 1834, v. 349.) *London*, 1834

On the influence of Induction. . . . *Vide* Jenkin. (*Phil. Mag.* v. 349, 444.) *London*, 1834

† Experimental Researches in Electricity. Reprinted from the Phil. Trans. 8vo. 574 pp. 8 plates. *London*, 1839

Latimer Clark's Cat. says: "*There is a second edition of this work dated* 1849, *but it appears to be only a reprint, since the preface is still dated* 1839."

Chemical Manipulation. 8vo. *London*, 1843

† Experimental Researches in Electricity. Reprinted from the Phil. Trans. Vol. ii. 8vo. 302 pp. 5 plates. *London*, 1844

† On Electric Induction. Associated cases of Current and Static Effects. 8vo. 11 pp. *London*, 1854

On Subterraneous Electro-Telegraphic Wires. 8vo. (*Phil. Mag.* ser. iv. vol. vii.) *London*, 1854

Une solennelle et rassurante adhésion, 1 Mars, 1854. 8vo. 2 pp. (*Faraday's copy.*) *Paris*, 1854

Experimental Researches in Electricity. Reprinted from the Phil. Trans. Vol. iii. 8vo. 588 pp. 4 plates. *London*, 1855

Experimental Researches in Chemistry and Physics. (*From Quaritch's Cat., No.* 202, 1870.) 1859

Faraday, Michael.—*continued.*

Lectures on the various Forces of Matter, and their relations to each other. 12mo. 59 woodcuts. 1860

Zuchold (1860, *p.* 55) *says* : "*Edited by William Crookes, London.*"

Six Lectures on various Forces of Matter. 3rd edition. 8vo. *London*, 1862

† Faraday as a Discoverer. By John Tyndall. 8vo. 171 pp. 2 portraits. *London*, 1868

Eloge historique de Michel Faraday. Lu . . . 10 Mai, 1868, Institut Impérial de France (par Dumas). 4to. 58 pp. *Paris*, 1868

6 diverse Abhandlungen über Electricität, Magnetismus, &c. aus verschiedenen eng. Zeitschriften. (*From Weber, Cat. Berlin*, 1870.)

† **Faraday and Schonbein.** On a peculiar Voltaic condition of Iron, &c. . . (Several articles.) 8vo. 14 pp. and 2 pp. (*London and Edinburgh Magazine for July and August*, 1836.) *London*, 1836

Faraday, M. and **Sturgeon**, W. Supplementary note to Faraday's eleventh series of Experimental Researches. 8vo. 5 pp. (*Annals of Electricity*, iv. 229 and 231.) *London*, 1839

Faraday and Riess. On the action of Non-conducting Bodies in Electric Induction. 8vo. 1856

† **Fardely**, W. Die Galvanoplastik. 8vo. 47 pp. 1 plate. *Mannheim*, 1842

Sur les télégraphes electriques. 4to. (*Comptes Rendus*, xviii. 792.) *Paris*, 1844

Der electr. Telegraph. 8vo. *Mannheim*, 1844

Der Zeiger-Telegraph für den Eisenbahndienst dargestellt, &c. . . . nebst practischen Angaben über die Behandlung der Apparate, &c. 8vo. 47 pp. 8 plates. *Mannheim*, 1856

† **Farey**, J. A series of queries addressed to Dr. Burney, of Gosport, regarding Shooting Stars and Meteors, with some suggestions on the same subject to the Astronomical Society of London for making these phenomena available in settling the longitudes of places, and towards extending our knowledge of the very numerous planetary and satellitic bodies composing the Solar system. 8vo. 6 pp. (*Phil. Mag.* lvii. 346.) *London*, 1821

† **Farey**, J. sen. On Shooting Stars and Meteors. 8vo. 4 pp. (*Phil. Mag.* lviii. 183.) *London*, 1821

Faria, De e Arago. Breve compendio o tratado sobre a Electricidade. 4to. 2 platos. *Lisboa*, 1800

† **Fario e Zantedeschi.** Esperienze intorno alle correnti elettro-fisiologiche negli animali a sangue caldo. Memoria i. 8vo. 40 pp. (*Articolo estratto dal vol.* iii. *del Memoriale della Medicina Contemporanea.*) *Venezia*, 1840

† **Farquharson**, J. On a definite arrangement, and order of the appearance and progress, of the Aurora Borealis, and on its height above the earth. (Read February 29, 1829.) 4to. 18 pp. (*Phil. Trans. for* 1829, p. 103.) *London*, 1829

† Report of a geometrical measurement of the height of the Aurora Borealis above the earth. 4to. 14 pp. (*Phil. Trans.* 1839, p. 267.) *London*, 1839

† **Farrar**, J. An account of the violent and destructive Storm of September 2nd 1815. 4to. 6 pp. (*Mem. Amer. Acad.* Old series, iv. part i. p. 92.) *Cambridge, U.S.* 1818

† An account of a singular Electrical Phenomenon observed during a snow-storm accompanied with thunder. 4to. 5 pp. (*Mem. Amer. Acad.* Old series, iv. part i. p. 98.) *Cambridge, U.S.* 1818

Elements of Electricity and Magnetism, &c. By Lovering. *Cambridge, U.S.* 1842

Farrar, J.—*continued.*

Elements of Electricity, Magnetism, and Electro-Magnetism. (Second part of a course of Natural Philosophy, &c.) *Cambridge, U.S.* 1826

† Elements of Electricity, Magnetism, and Electro-Dynamics. . . . 2nd part of a course of Natural Philosophy, at Cambridge, New England. 8vo. 376 pp. 6 plates. *Boston*, 1839

Fatio (Facio, Faccio) de Duillier, N. Lettre à Cassini sur une lumière extraordinaire qui paraît dans le ciel depuis quelques années. *Amsterdam*, 1686

† Fau, J. Manipulations électrotypiques . . . Traduit de l'Anglais sur la 10me éd. de Walker et augmenté de Notes, &c. 12mo. 116 pp. *Paris*, 1843

Manipulations électrotypiques trad. de Walker. 6me édition Française, 18me édition Anglaise. 6me édition. 16mo. 156 pp. *Paris*, 1861

Faulwetter, Carl Alexander. *Born June 29, 1745, at Nürnberg; died May 15, 1801, at Nürnberg.*

† Kurze Grundsätze der Elektricitäts-Lehre. 3 vols. 8vo. 27 plates. *Nürnberg*, 1793

† Kurze Grundsätze der Elektricitäts-Lehre. 1794. The 5th part (or 4th vol.) 8vo. 440 pp. *Nürnberg*, 1794

† Faure, G. Conghietture fisiche intorno alla cagione dei fenom. nella macchina elettrica. 4to. 140 pp. *Roma*, 1747

Favre, Pierre Antoine. *Born February 20, 1813, at Lyon.*

† Thèse de physique. Recherches thermiques sur les courants hydro-électriques. 4to. 28 pp. *Paris*, 1853

Favre. (*Vide* Mallet-Favre.)

Fay. (*Vide* Du Fay.)

† Faye, H. A. E. A. Sur un moyen de soustraire les pendules astronomiques à l'influence des variations de la température et de la pression atmosphérique. 4to. (*Comptes Rendus*, 1847, xxv. p. 375.) *Paris*, 1847

Fayet. (*Vide* Nougarede de Fayet.)

Fea, C. Relazione dell' Aurora-boreale veduta in Roma, &c. . . . li 3, 4, 5, 6, e seguenti d'Agosto, con Osservazioni critiche. 8vo. 17 pp. *Roma*, 1831

Appendice alla Relazione sudetta, in risposta a Tre oppositori. 8vo. 13 pp. *Roma*, 1831

Fearnley, C. (*Vide* Hansteen and Fearnley.)

† Feburier. Mémoire sur quelques propriétés du fluide électrique considérées dans leur rapport avec la Végétation. 8vo. 94 pp. (*Printed by order of the Soc. d'Agriculture.*) *Paris*

Fech. (*Vide* Lozeran-du-Fech.)

Fechner. Lois expérimentales de l'intensité des courants dans un circuit fermé. 4to. *Leipsig*, 1831

† Maassbestimmungen über die galvanische Kette. 4to. 260 pp. 1 plate. *Leipzig*, 1831

† De nova methodo magnetismum explorandi, &c. 4to. 25 pp. *Leipzig*, 1832

† De magnetismo variabili qui chalybi actione galvanica inducitur commentatio, &c. 4to. 24 pp. *Lipsiæ*, 1835

Fechner, Gustav Theodor. *Born April 19, 1801, at Gross-Särchen, near Muskau Lausitz.*

† Handbuch der dynamischen Elekt. (*Trans. of Demonferand's Manual.*) *Leipsig*, 1824

Lehrbuch der Experimental-physik oder Erfahrungs-naturlehre; zweite Auflage der deutschen Bearbeitung, mit Hinzufügung der neuen und einheimischen Entdeckungen. 2nd edition. 5 vols. (*Pog.* i. 727.) 1828-30

Fechner, Gustav Theodor—*continued.*

Lehrbuch des Galvan. u. Electro chemie. 8vo. *Leipzig*, 1829

† Elementarlehrbuch des Elektromagnetismus nebst Beschreibung der hauptsachlichsten electro-magn. Apparate. 8vo. 157 pp. 4 plates. *Leipzig*, 1830

Repertorium d. Experimental-physik. 8vo. 3 vols. *Leipzig*, 1832

Many papers in Schweigger's Journal, vols. xlix. 1829 to lxix. 1833.

Many others in Poggendorff's Annalen, vols. xli. 1837 to lxiv. 1845.

† De variis intensitatem vis Galvanicæ metiendi methodis. Disputatio . . . 4to. *Lipsiæ*, 1835

† Über die physikalische und philosophische Atomenlehre. 8vo. 210 pp. *Leipzig*, 1855

Uber die physikalische und philosophische Atomlehre. 2 vermehrte Auflage. 8vo. 360 pp. *Leipzig*, 1864

Feddersen, Bernhard Wilhelm. *Born March 26, 1832, at Schleswig (Stadt).*

† Beiträge zur Kenntniss des elektrischen Funkens. Inaugural dissertation. 8vo. 35 pp. (*Poggend. Ann.* ciii. 1858.) *Kiel*, 1857

Uber die eigenthuml. Stromtheilung bei Entladung d. Leidener Batterie. 8vo. (*Poggendorff, Ann.* cxv. 1862.) 1862

† **Feddersen**, W. Über elektrische Wellenbewegung vorgelegt von Hankel. 8vo. 4 pp. *Stockholm*, 1859

† Die oscillatorische elektrische Entladung und ihre Grenze. Vorgelegt von Hankel. 8vo. 7 pp. 1861

† Uber die elektrische Flaschenentladung. 8vo. 31 pp. 1 plate. (*Poggendorff's Ann.* cxiii. 437.) *Leipzig*, 1862

† Über die elektrische Flaschenentladung. 8vo. 40 pp. 1 plate. (*Poggendorff's Ann.* cxvi. 132.) *Leipzig*, 1862

† **Feilitzsch**, F. C. O. Many papers in Poggendorff's Annalen, 1844-45, &c.

† **Feilitzsch**, F. von. On the physical distinction of Magnetic and Diamagnetic bodies. Communicated by Mr. Faraday. 8vo. 7 pp. (*Phil. Mag. January*, 1851.) *London*, 1851

† Erklärung der diamagnetischen Wirkungsweise durch die Ampère'sche Theorie. Erste Abhandl. 1852. Zweite Abhandl. 1853-58. (*Poggend. Ann.* lxxxvii.) *Leipzig*, 1852-53

† Die Lehre von den Fernwirkungen des galvanischen Stromes. Elektromagnetismus, Elektrodynamik, Induction und Diamagnetismus. 8vo. 834 pp. 3 plates. *Leipzig*, 1865

Felbiger, Johann Ignatz von. *Born January 6, 1724, at Gross-Glogau; died May 17, 178? at Pressburg.*

† Die Kunst Thuerme, oder andere Gebäude, vor den schadlichen Wirkungen des Blitzes, durch Ableitung zu bewahren (angebracht an einem Thurm). 8vo. 110 pp. 1 plate. *Breslau*, 1771

Vorschlaege wie Nordlichter zu beobachten. (*From Poggendorff*, i. 730.) *Sagan*, 1771

Wie Nordlichter zu beobachten. 4to. (*From Young*, p. 482.) *Sorau*, 1772

(*Heinsius says "Vorschlage wie . . . and* 1771.")

Über die Witterung. 4to. 1 plate. *Sagan*, 1773

(*Poggendorff* (i. 730) *says: "Anleitungen jede Art von Witterung in Karten zu bezeichnen, usw.* 1773.)

Felbiger, Johann Ignatz von—*continued.*

Wie weit gewähren wohl Gewitterableiter, Sicherheit fur umstehende Gebaude? *Pressburg*, 1787

Feldt, L. De transitu nonnullarum stellarum . . . tabula. Adjecta adhuc sunt de electricis in atmosphæra phænomenis &c. obss. *Brunsbergæ*, 1844

Felici. On the laws of Induction. (*From Matteucci*)

Felkel, A. Wahre Beschaffenheit des Donners. *Wien*, 1780

† Fellens, G. B. Manuale di Meteorologia. . . . 12mo. 155 pp. 1 plate. *Milano*, 1832

(*There is an edition, Paris, 1833, in 18mo.*)

Feller, C. G. Dissertatio de therapia per electrum. *Lipsiæ*, 1785

Fenwick. Reflections on calcareous manure and electric fluids, &c. (*From Watt.*) 1798

Fenwick, T. A treatise on subterraneous Surveying and the variation of the Magnetic Needle. 2nd edition. 8vo. *London*, 1823

† Fenwick, T., and Baker. Elementary and practical treatise on subterraneous Surveying and the Magnetic Variation of the Needle. 3rd edition. 8vo. 160 pp. (*With Baker's method of conducting.*) *London*, 1861

Ferguson, James. *Born* 1710, *at Keith, Banffshire, Scotland; died November* 16, 1776, *at Edinburgh.*

† An introduction to Electricity. 1st edition. 8vo. 140 pp. 3 plates. *London*, 1770

An introduction to Electricity. 2nd edition. 8vo. (*Reprint.*) *London*, 1775

An introduction to Electricity. 3rd edition. 8vo. 140 pp. 3 plates. (*Reprint.*) *London*, 1778

† Introduzione alla elettricità traduzione dall' Inglese. 8vo. 144 pp. 3 plates. *Firenze*, 1778

† An introduction or lectures on Electricity. New edition, corrected with an appendix, &c., by C. F. Partington. 8vo. 102 pp. 1 plate. *London*, 1825

† Ferguson and Brewster. Essays and treatises on astronomy, electricity, &c., with an appendix by Sir D. Brewster. New edition. 8vo. 382 pp. 14 plates. *Edinburgh*, 1823

† Ferguson, R. M. Electricity. 8vo. 273 pp. (*Chambers' Educational Course.*) *London and Edinburgh*, 1866

Ferguson, E. F. T. (*Vide* Bombay Magnetical Observatory.)

Fernaux, Coupans. Bibliothèque Asiatique et Africaine; ou catalogue des ouvrages relatifs à l'Asie, &c. En 2 parties. 8vo. *Paris*, 1841

Ferrara, Francesco. Sopra l'ambra siciliana. 8vo. *Palermo*, 1805

† Ferrari (*i.e.* D. F.) Alcune nozioni di elettro-metallurgia. 4 pp. (*In l'Economista*, Anno iv. vol. i. pp. 31 and 142.) *Milano*, 1846

Ferrari, Girolamo. *Born* 1794 (*about*), *at Vigevano.*

† Metodo elettro-chimico per stagnare. Articolo di lettera di G. Ferrari farmacista a Vigevano. 8vo. 2 pp. (*Bibl. Ital.* xcviii. 268.) *Milano*, 1840

† Sulla galvanizzazione, osservazioni ed esperienze del farmacista Gerolamo Ferrari, comunicate alla regia Accademia delle scienze di Torino. 8vo. 2 pp. (*Bibl. Ital.* tom. c. p. 275.) *Milano*, 1840

† Teoria della grandine. Folio. 3 pp. (*L'Economista*, Anno iv. vol. ii. p. 172.) *Milano*, 1846

Ferrari. (*Vide* Resti-Ferrari.)

Ferrario, O. Corso di chimica generale. *Milano*, 1837-40

† Processi del Sig. Elkington per vestire metalli. 8vo. 4 pp. (*In Giorn. I. R. Ist. Lomb.* i. 273.) *Milano*, 1841

Ferrario, O.—*continued.*

† Apparato semplice per dorare l'argento, il rame, l'acciajo, e per riprodurre rilievi galvano-plastici, di R. Boettger. 8vo. 10 pp. (*In Giorn. I. R. Ist. Lomb.* ii. 276.) *Milano*, 1841

† **Ferri**, P. Riflessioni sopra gli Argomenti addotti dal . . . Maffei . . . intorno la Formazione del Fulmine. 4to. 52 pp. *Vicenza*, 1748

Fershey, C. G. Observations upon the Meteors of August. 4to. (*Trans. Amer. Phil. Soc.*, New Series, vol. vii.) *Philadelphia*, 1841

Ferussac, André Etienne (Baron). *Born December* 30, 1786, *at Chartres, Dép. Eure and Garonne; died January* 21, 1836, *at Paris.*

† **Ferussac** and others. Bulletin des sciences mathématiques, astronomiques, physiques et chimiques. *Begins in* 1824. 16 vols. 8vo. plates. (*Muncke in Gehler*, vii. 564, *says* 1823–31.) *Paris*, 1824-31
(*The other writers are Ampère, Cauchy, Dupin, and Damoiseau.*)

† Bulletin des sciences téchnologiques. 19 vols. 8vo. plates. *Paris*, 1824-31

Feuillée, Louis. *Born* 1660, *at Mane, near Sisteron, Provence; died April* 18, 1732, *at Marseilles.*

Observations pour la variation de l'aimant. 4to. (*Mémoires de Paris*, 1704.) *Paris*, 1704

Observations de la variation et de l'inclination de l'aimant à Cartagena, à Portobella et à Porto-Cabello. 4to. (*Mémoires de Paris*, 1708; *vide Whiston Longit.* p. xxv.) *Paris*, 1708

Observations de la variation et de l'inclination de l'aimant à Conception et à Coquimbo. 4to. (*Mémoires de Paris*, 1711.) *Paris*, 1711

Journal d'Observations physiques et mathématiques. Indes occidentales. 4to. 2 vols. (*MSS. Catalogue, Bordeaux Académie.*) *Paris*, 1714

Observation sur une pluie de sable dans la mer atlantique précédée d'une aurore boréale. 4to. (*Mémoires de Paris*, 1719.) *Paris*, 1719

† **Fick.** Untersuchungen über electrische Nervenreizung. 4to. 51 pp. *Braunschweig*, 1864

† **Fickel.** Der mineralische Magnetismus als grosses Heilmittel. 8vo. 32 pp. *Leipzig*, 1836

† **Fieber**, F. Compendium der Elektrotherapie. 8vo. 146 pp. *Wien*, 1869

Fiedler, K. G. Merkwürdige Blitzschlaege. 8vo. (*Gilb. Ann.* lxviii.) 1846

Fiedler, K. W. Über Blitzrochren in Deutschland und Ungarn.

† **Field**, H. M. History of the Atlantic Telegraph. 8vo. 364 pp. *New York*, 1866

† **Fierstemann.** Conducting power of different fluids for Voltaic Electricity. 8vo. 1 p. (*Phil. Mag. or Annals* iv. 383.) *London*, 1828

Figuier, Louis Guillaume. *Born February* 15, 1819, *at Montpellier.*

† Exposition et histoire des principales découvertes scientifiques modernes. 4th edition. 3 vols. 12mo. *Paris*, 1855

† Exposition et histoire des principales découvertes scientifiques modernes. Tome iv. contenant la machine électrique. 12mo. 532 pp. *Paris*, 1857

† Les applications nouvelles de la science à l'industrie et aux Arts en 1855. 12mo. 428 pp. cuts. *Paris*, 1857

† L'année scientifique et industrielle. Troisième Année. 2 vols. 12mo. *Paris*, 1859

Filiasi, Jacopo. *Born* 1750 (*about*), *at Venice; died February* 18, 1829, *at Venice.*

† Memoria sulle procelle che annualmente sogliono regnare nelle maremme Veneziane. 8vo. 43 pp. (*Giorn. Fis. Med.* iv. 152.) *Pavia*, 1792

† **Finlaison, John, and Bain.** An account of some remarkable applications of the Electric fluid to the useful arts, by Mr. Alex. Bain, with a vindication of his claim to be the first inventor of the Electro-Magnetic Printing Telegraph, and also of the Electro-Magnetic Clock. By John Finlaison. 8vo. 127 pp. 5 plates. *London*, 1843

Firmin. Natural History of Surinam.

† **Firminger, T.** Account of the meteor seen on the evening of Sunday, November 13, 1803; with some observations on the best means of ascertaining the altitude, bearing, magnitude, distance, and velocity of such phenomena. 8vo. (*Phil. Mag.* xvii. 279.) *London*, 1803

Fischer, Daniel. Relatio de fulgure tonitru et fulmine. De insolito quodam phænomeno Kesmarkini die 10 Aug. 1717. *Breslau*

Fischer, D. G. von. Notice sur la Sibérite, ou la Tourmaline rouge de Sibérie. 4to. *Mosk*, 1813

Notice sur la Sibérite, ou la Tourmaline rouge de Sibérie. 4to. *Mosk*, 1818

Fischer, Ernst Gottfried. *Born July* 17, 1754, *at Hohenseiche, near Saalfeld; died January* 27, 1831, *at Berlin.*

Über Telegraphie. (*G. N. Fischer's Teutsche Monatsschrift*, 1795.) 1795

Lehrbuch d. méchanischen Naturlehre. 8vo. *Berlin*, 1805

† Physique méchanique trad. par Biot. 8vo. 8 plates. *Paris*, 1806

Beschreibung d. Volta'schen Eudiometers. 8vo. (*Neue Schriften d. Gesellsch. naturf. Freund. in Berlin*, i. 1807.) *Berlin*, 1807

Lehrbuch d. Mechanischen Naturlehre. Zweite gaenzlich umgearbeitete und verm. Aufl. 2 vols. *Berlin*, 1819

Physique Traduite de l'allemand, avec Notes par Biot. 8vo. 1819

Über den Ursprung der Meteorsteine. 8vo. (*Poggendorf*, i. 752, *says in Abhandl. d. Berliner Acad. f.* 1820 *u.* 1821.) *Berlin*, 1820

Lehrbuch d. mechanischen. Naturlehre 3e Aufl. 2 vols. 8vo. 7 plates. *Berlin*, 1827

Mechan. Naturlehre im Auszuge f. d. höh. Schulunterricht entworfen v. E. F. August. 8vo. *Berlin*, 1829

Physique méchanique trad. par Biot revue et augm. 8vo. 12 plates. *Paris*, 1830

Lehrbuch d. mechan. Naturlehre neu bearb. v. E. F. August. 2 vols. 4to. verm. u. verb. Aufl. *Berlin*, 1837

† Praktische Anleitung zur Verfertigung &c. Künstlicher Magnete . . so wie die neueste Entdeckung denselben die höchste Anziehungs kraft zu erhalten . . usu. 8vo. 53 pp. 2 plates. *Heilbronn*, 1833

Practical Treatise on Medical Electricity.

Fischer, Johann Andreas. *Born November* 28, 1667, *at Erfurt; died February* 13, 1729, *at Erfurt.*

De magnetismo macro-et microcosmi. *Erfurth*, 1687

Fischer, J. B. De fœno sub combustione per fulminis ignem in massam seu scoriam calcariam redacto. 4to. (*Nov. Act. Acad. Nat. Cur.* iii. 1733.) *Breslau*, 1733

Fischer, J. C. Geschichte der Physik seit der Wiederherstellung der Kunste und Wissenschaften bis auf die neuesten Zeiten. 8 vols. 8vo. *Göttingen*, 1801-8

Fischer, J. N. Beweis das das Glockenlauten bey Gewitter schadlich sey. 8vo. *München*, 1784

† **Fischer**, K. C. F. Über d. gegenseitige Einwirk. v. Elektromagneten, Stahlmagneten u. deren Anker. Ein Beitrag zur Lehre, v. Magnetismus von Director Dr. Fischer. 4to. 29 pp. *Nordhausen*, 1842

Fischer, Nicolaus Wolfgang. *Born January* 15, 1782, *at Gross Meseritz, Mähren; died August* 19, 1850, *at Breslau.*

Krit. Erscheinungen, die als. Wirk. d. galvan. Action erklärt. worden sind. usw. 4to. (*Abhandl. d. Berlin Akad. fur* 1814-15.) *Berlin*, 1814-15

Unterschied zwicken chem. u. galv. Erscheinungen. 8vo. (*Gilbert's Ann.* lxxii.) *Leipsig*, 1822

Uber d. merkw. Verhalt. d. salzsauren Zinns zum Wasser usw. 8vo. (*Schweigger's Jl.* xxxix.) *Nürnburg*, 1823

† Das Verhaltniss der chemischen Verwandschaft zur galvanischen Electricität in versuchen dargestelt. 8vo. 238 pp. *Berlin*, 1830

Über d. Nutzanwendung d. Galvanismus in med.-gerichtl. Hinsicht. (*Hufeland's Journal der Heilkunde*, vol. lxx.) 1830

Über Ozon. 8vo. (*Poggendorf's Ann.* vols. lvi. u. lxxvi.) *Leipsig*, 1845 u. 1849

† **Fisher**, G. On the Errors in Longitude as determined by chronometers at sea, arising from the action of the iron in the ships upon the chronometers. 8vo. 9 pp. (*Phil. Mag.* lvii. 249.) *London*, 1821

† Magnetical experiments made principally in the south part of Europe and in Asia Minor, during the years 1827 to 1832. 4to. 16 pp. (*Phil. Trans.* 1833.) *London*, 1833

† **Fitzinger**. Über den Proteus angumus der Autoren. 8vo. 13 pp. (*Sitzungsb. d. k. Akad. d. Wiss. Wien*, 1850, ii. Bd. iii. Heft, p. 291.) *Wien*, 1850

† **Fitzroy**, Admiral. Barometer Manual. 4th ed. Board of Trade. 8vo. 18 pp. *London*, 1861

† Barometer and Weather Guide. Board of Trade. 8vo. 31 pp. *London*, 1861

The Weather Book; a manual of practical meteorology. 8vo. 470 pp. 16 illustrations. *London*, 1862

† **Fizeau**, Armand Hippolite Louis. *Born September* 23, 1819, *at Paris.*

Contre-épreuve en cuivre d'une image photographique, obtenue au moyen des procédés galvanoplastiques, sans altération de l'image originale. 4to. (*Comptes Rendus*, xii. 401.) *Paris*, 1841

Examen des expériences, faites en 1848 et 1849, aux Etats-Unis, par MM. S. C. Walker et O. M. Mitchel, pour déterminer la vitesse de propagation de l'électricité. 4to. *Paris*, 1851

(*Moigno says Mém. présenté à l'Acad. des Sciences le* 13 *Janvier*, 1851. *Not in Poggendorf or in the Comptes Rendus.*)

Sur les machines électriques inductives et sur un ons facile d'accroître leur effets. 4to. (*Comp. Rend.* xxxvi.) *Paris*, 1853

Fizeau, A. H. L. et **Foucault**. Sur l'intensité de la lumière émise par le charbon dans l'expérience de Davy. 8vo. (*Ann. de Chim. et Phys.* Ser. 3, xi. 1844.) *Paris*, 1844

Fizeau, A. H. L. et **Gounelle**. Sur la vitesse de la propagation de l'électricité. 4to. (*Comp. Rend.* xxx. 1850.) *Paris*, 1850

Flagg, H. C. Observations on the Numb Fish, or Torporific Eel. 4to. 4 pp. (*Trans. Amer. Phil. Soc.*, Old Series, vol. ii. p. 170.) *Philadelphia*, 1786

Flaugergues, P. P. Traité des machines électro-dynamiques. *Paris*, 1840

Fleischhauer, J. H. Die Naturkräfte im Dienste des Menschen. Gemeinfassliche naturwissenschaftliche Vorlesungen. 3. Vorlesung. Die elektromagnetische Telegraphie. Nach den besten Quellen bearbeitet. 8vo. 56 pp. *Thüringen*, 1851

Fleischhauer, J. H.—*continued.*

Die elektromagnetische Telegraphie. Nach den besten Quellen bearbeitet. 8vo. (*In "Die Naturkräfte im Dienste des Menschen." Gemeinfassliche naturwis. senschaftliche Vorlesungen.*) *Langensalza*, 1855

Die Meteore. 2 Abtheilung. Die Elektro- und Aëro-Meteore und die Atmosphäre als deren Herd, &c. Mit einer Zugabe "Das Barometer als Wetterglas." 8vo. vi. and 89 pp. 1 plate lith. (*In "Die Naturkräfte im Dienste des Menschen. Gemeinfassliche naturwissenschaft Vorlesungen. 2nd verbesserte Auflage.*") . *Langensalza*, 1855

Fleuriau de Bellevue. *Born about* 1761; *died February* 9, 1852, *at La Rochelle.*

Mémoire sur les Pierres météoriques, et notamment sur celles tombées près de Jonzac, au mois de Juin 1819. 24 pp. 2 plates. *Paris*, 1821

† On Meteoric Stones. Paper read in 1820 at the Academy, particularly on those which fell near Jonzac, in the Department of Charente. 8vo. 2 pp. (*Phil. Mag.* lviii. 456.) *London*, 1821

Flinders, Matthew. *Born* 1760 *at Donnington, Lincolnshire.*

Concerning the differences in the Magnetic Needle on board the "*Investigator*," arising from an alteration in the direction of the ship's head. 4to. (*Phil. Trans.* 1805.) *London*, 1805

A voyage to Terra Australis . . . in the years 1801-1803, &c. in the ship "*Investigator.*" 4to. 2 vols. 9 plates, and an atlas in folio containing 18 maps and 10 plates. *London*, 1814

Floderus, M. M. Om dubbel och frydubbel Telegrafering. Akademisk Afhandling. 8vo. 20 pp. 1 plate. *Upsala*, 1857

Florence. Acad. del Cimento.

Vide Saggi.		1666
Do.		1667
Do.		1684
Do.		1684
Do.	2nd edition	1691
Do.	4th edition	1711
Do.	Tentamina	1731
Do.	...	1761
Do.	In Tozzetti	1780
Do.	Gazzeri	1841
Do.	Edi. Classiche	—

Florence Antologia. (*Vide* Antologia di Firenze.)

Florence Museum. Annali del Museo Imperiale di Fisica e Storia Naturale di Firenze. 2 vols. 4to. plates *Firenze*, 1808-9

Archivis meteorologico centrale Italiano nell' I. R. Museo di Fisica e Storia naturale. 1a Pubblicazione. *Firenze*, 1858

† **Florian, Joseph.** Beobachtungen über Magnetabweichungen. 8vo. 10 pp. (*Sitzungsb. d. k. Akad. Wissn. Wien* 1850. iv. Heft, p. 370.) *Wien*, 1850

† **Foissac, P.** Rapports et discussions de l'Académie Royale de Médecine sur le magnétisme animal . . . avec des notes par P. F. 8vo. 554 pp. *Paris*, 1833

† **Folkes, Martin.** An account of the Aurora Borealis seen at London on the 30th March last, as it was anxiously observed by Martin Folkes, Esq. 4to. 3 pp. (*Phil. Trans. for* 1717.) *London*, 1717

Follini, Giorgio. *Born about* 1751; *died August* 2, 1831, *at Turin.*

† Teoria elettrica brevemente esposta . . . 8vo. 164 and 4 pp. 2 plates. *Ivrea*, 1791

† Ragguaglio della guarigione di un ostinato tumore operata per via dell' Elettricità. 8vo. 8 pp. *Ivrea*, 1791

Follini, Giorgio—*continued.*

† Sul passaggio del Fulmine . . . delli 6 Agosto, 1795, nel Tempio di S. Andrea in Vercelli. 8vo. 49 pp. 1 plate. *Vercelli*, 1795

† Memoria fisica sull' uso del fuoco elettrico in medicina. 8vo. 76 pp. *Casale*, 1796 (?)

Physicæ elementalis elementa. *Taurini*, 1823

Fond. (*Vide* Sigaud-de-la-Fond.)

Fonda. Sopra la maniera di preservare gli edifizii dal Fulmine. *Roma*, 1770

Fontana. Ricerche filosofiche sopra la fisica animale. *Firenze*, 1775

Opuscoli scientifici. 8vo. *Firenze*, 1783

Fontana, Felice. *Born April 15, 1730, at Pomarolo, near Roveredo, Tyrol; died January 11, 1805, at Florence.*

Descrizioni ed usi di alcuni stromenti per misurare la salubrità dell' Aria. *Firenze*, 1774

† Articolo di lettera all' Ab. G. Mangelli. Firenze, 10 Nov. 1792. 8vo. 3 pp. (*Giorn. Fis. Med.* iv. 116.) *Pavia*, 1792

Lettere sopra l'elettricità animale. 1793

Fontana, Gregor. Disquisitiones physico-mathematicæ nunc primum editæ. 4to. 384 pp. 3 plates. *Papiæ*, 1780

*† Disquisitiones physico-mathematicæ (nunc primum editæ). 4to. 384 pp. *Papiæ*, 1780

Fontenelle. *Vide* Julia-Fontenelle.

† Fonvielle, W. de. Eclairs et Tonnerre. 12mo. *Paris*, 1867

† Forbes, Eli. An account of the effects of Lightning on a large rock in Gloucester, in a letter . . . to . . . M. Cutler (dated July 3, 1783). 4to. 4 pp. (*Mems. of the American Acad.*, Old Series, i. 253, part ii.) *Boston*, 1785

Forbes, James David. *Born April 20, 1809.*

History of Natural Philosophy. 4to. *Edinburgh*

† Account of some experiments in which an Electric Spark was elicited from a Natural Magnet. 4to. 9 pp. 1 plate. (*Edinb. Trans.* tom. xii.) (*Arago's copy.*) *Edinburgh*, 1832

† An account of some experiments on the Electricity of Tourmalin, &c., when exposed to heat. 4to. 14 pp. (*Edinb. Trans.* tom. xiii.) (*Arago's copy.*) *Edinburgh*, 1834

† Account of some experiments made in different parts of Europe on Terrestrial Magnetic Intensity, particularly with reference to the effect of Height. 4to. 29 pp. 1 map. (*Edinb. Trans.* tom. xiv.) (*Arago's copy.*) *Edinburgh*, 1839

† Account of some additional experiments on Terrestrial Magnetism made in different parts of Europe in 1837. 4to. 9 pp. (*Trans. R. S. Edinb.* vol. xv. part i.) *Edinburgh*, 1840

Review of the Progress of Mathematical and Physical Science. 4to. *London*, 1858

* General Index to the *British and Foreign Medical Review*. 8vo. *London*, 1849

† Forbes, P. On the application of Electro-Magnetism as a motive power; in a letter to Faraday. 8vo. 2 pp. (*Annals of Electricity*, v. 239.) *London*, 1840

Forbin, Comte de. Les Mémoires du Comte de Forbin en 1646. Edition de 1740. *Amsterdam*, 1740

Force, P. Record of Auroral Phenomena observed in the higher northern latitudes, compiled by Peter Force. 4to. 118 pp. *Washington*, 1856

† **Forsch, J. A.** Katechismus der elektrischen Telegraphie. 8vo. 58 pp. *Leipzig*, 1852

Handleiding tot de Kennis der electrische Telegraphie. Naar het Hoogduitsch door M. J. van Oven. 12mo. *Utrecht*, 1853

† Handbuch der electrischen, galvanischen, magnetischen und electromagnetischen Telegraphie. 8vo. 161 pp. 45 plates. *Wien*, 1854

Forskal, P. Beobachtungen über d. Silurus electricus, über das Leuchten des Meeres, &c., auf seiner Reise in Arabien 1761-63. (*From Poggendorff*, i. 776, "Deren Früchte gesammelt sind von K. Niebuhr in Flora aegyptiaco-arabica Havn, 1775 : Descriptiones annualum.")

Forsten Vershour. (*Vide* Vershour.)

† **Forster, B.** Description of a method of fitting up in a portable form the Electric Column, lately invented by J. A. De Luc. Also an account of several experiments made with it. 8vo. 6 pp. 1 plate. (*Phil. Mag.* xxxv. 205.) *London*, 1810

† On De Luc's Column. 8vo. (*Phil. Mag.* xxxv. 317, 399, and 468 ; do. xxxvi. 74, 317, and 472.) *London*, 1810

† On De Luc's Electric Column. 8vo. 4 pp. (*Phil. Mag.* xxxvii. 197.) *London*, 1811

† On the Aurora Borealis. 8vo. 3 pp. (*Phil. Mag.* xli. 263.) *London*, 1813

† On constructing Electric Columns. 8vo. 2 pp. (*Phil. Mag.* xlvii. 265.) *London*, 1816

† Description of an electrical instrument called "The Thunder-storm Alarum." 8vo. 2 pp. 1 plate. (*Phil. Mag.* xlvii. 344.) *London*, 1816

† Luminous Belt of September 29th. 8vo. 2 pp. (*Phil. Mag.* iv. 463.) *London*, 1828

† **Forster, Dr.** Aurora Borealis lately observed at Boreham, in Essex. 8vo. 1 p. (*Phil. Mag.* iv. 317.) *London*, 1828

Forster, Johan. Georg. Adam. *Born November* 27, 1754, *at Nassenhuben ; died January* 11, 1794. (*Poggendorff*, 1566.)

Forster and Lichtenberg, G. C. Göttingisches Magazin für Wissenschaft u. Litteratur 3 Jahrgang. 8vo. *Gottingen*, 1780-82

Vide also Lichtenberg.

Forster Johann Reinhold. *Born October* 22, 1729, *at Dirschau ; died December* 16, 1798, *at Halle.*

Observations made during a voyage round the world, on Physical Geography, &c. 4to. 649 pp. of text. (*Opuscoli Scelti in* 4to. ii. 385, *on Auroræ.*) *London*, 1778

Observations on a Voyage round the world. 4to. *London*, 1778

† Osservazioni . . . Vermi lucenti . . . 4to. 3 pp. (*From Rozei*, 1783, *Luglio.*) (*Opus. Scelt.* vi. 419.) *Milano*, 1783

"Nachricht von einer an verschieden Körpern, auf einem mit Wachstuche überzogenen Tische, nach öfterer Entzündung entzündlicher Luft, und wenigem Elektrisiren, am folgenden Morgen bemerkten Anhaufung des Harzstaubes und Bärlappstaubes. 8vo. (*Gott. Mag.* iii. 1783, St. 4, pp. 573-5.) *Göttingen*, 1783

Über d. Natur d. Feuers u. d. Elektricität. (*Crell. Neue Entdeck.* xii. 1784.) 1784

† **Forster, L. Von.** Allgemeine Bauzeitung heraus gegeben v. L. V. Foster. *Wien*, 1836-47

Forster, Richard. An account of a Meteor seen at Shofford, in Berkshire, October 20, 1759, with some observations on the weather of the preceding winter. 4to. (*Phil. Trans.* 1759, p. 299.) *London*, 1759

Forster, Thomas Ignatius Maria. *Born November 9, 1789, at London; died about 1850.*

† Notice of a Memoir on Meteors of various sorts. By T. I. M. Forster, F.R.A.S., &c. Bruges, 1846. 8vo. (*Phil. Mag. 3rd Series*, xxxi. p. 219.) *London*, 1847

† **Forster**, T. On De Luc's Electric Column. 8vo. 2 pp. (*Phil. Mag.* xxxvii. 424.) *London*, 1811

† On the influence of the Atmosphere in certain diseases. 8vo. 3 pp. (*Phil. Mag.* xxxviii. 68.) *London*, 1811

Researches about Atmospheric Phenomena and . . . Meteorological Journals, &c. 8vo. *London*, 1813

† Observations on a Fiery Meteor. 8vo. 1 p. (*Phil. Mag.* xliii. 26.) *London*, 1814

† Observations on certain luminous Meteors called Falling Stars. 8vo. 3 pp. (*Phil. Mag.* lvii. 418.) *London*, 1821

† On simultaneous Thunder-storms. 8vo. 2 pp. (*Phil. Mag.* lx. 195.) *London*, 1822

† Researches about Atmospheric Phenomena and Calendar, &c. 3rd edition. 8vo. 6 plates. *London*, 1823

† On the Aurora Borealis of 26th September. 8vo. 2 pp. (*Phil. Mag. or Annals*, iii. 75.) *London*, 1828

† On the Zodiacal Light of the 29th of September, as it appeared from Cholmsford. 8vo. 2 pp. (*Phil. Mag. or Annals*, iv. 389.) *London*, 1828

Forster. (*Vide* Bruhns and Forster.)

Fortin of Brest. Renowned for improvements in the Declinatorium and Inclinatorium. (*Foggendorff*, i. 778.)

Fortis, Giovanni Battista genannt Alberto. *Born November 11, 1741, at Padua; died October 21, 1803, at Bologna.*

† Lettera del . . . Fortis allo Spallanzani su gli sperimenti di Pennet. 4to. 15 pp. (*Opus. Scelt.* xiv. 259.) *Milano*, 1791

† Elogio di Alberto Fortis di C. Amoretti. Avviso dell' Editore. 4to. 16 pp. e 1 p. (*Nuova Scelt. d'Opusc.* ii. pp. 425 e 440.) *Milano*, 1807

Fortschritte (die) des Physik, dargestellt von der physikalischen Gesellschaft zu Berlin. Redigirt von G. Karsten, A. K. Kronig, &c. 8vo. *Berlin*, 1855-58

Foster, Parry, and Christie.

† 1. Observations on . . . the Needle at the Whale Fish Islands, by Foster. 2 pp.

2. Magnetical Observations at Port Bowen, in 1824-5 . . . by Parry and Foster. 44 pp.

3. Abstract of the daily Variation of the Needle, No. 2, by Foster. And Abstract of Results . . . 7 pp. (*i.e.* Parry and Foster's Observations on . . intensity.)

4. Dip of the magnetic Needle observed at Woolwich and at different stations within the Arctic Circle, by (?) 3 pp.

5. Observations on the diurnal changes in the position of the horizontal Needle, under a reduced directive power, at Port Bowen, 1825, by Foster. Communicated January 12, 1826. 4 plates. 48 pp.

6. A comparison of the diurnal changes of intensity in the dipping of horizontal Needles at Port Bowen, by Foster. Communicated February 25, 1826. 11 pp.

† 7. Account of the repetition of Christie's experiments on the magnetic properties imparted to an iron Plate by rotation, at Port Bowen, in May and June, 1825, by Foster; together with Christie's remarks thereon. 2 plates. 18 pp. (*From Phil. Trans.*) (*Arago's copy.*) *London*, 1826

Foster, H. A comparison of the changes of magnetic intensity . . . in the dipping and horizontal Needles at Trewrenburgh Bay. 4to. 9 pp. (*Phil. Trans.* p. 303, 1828.) *London*, 1828

Foster, G. C. (*Vide* Lardner, 1866.)

Fothergill, John. *Born October* 12, 1712, *at Carr End, Yorkshire; died December* 26, 1780, *at London.*

† An extract of John Fothergill his Essay upon the origin of Amber. Read March 1, 1743-4. 4to. 5 pp. (*Phil. Trans.* xliii. 21.) *London*, 1744

Account of the Magnetical machine contrived by the late Dr. Gowin Knight. 4to. (*Phil. Trans.* 1776, p. 591.) *London*, 1776

† **Fotheringhame,** T. Directions for ascertaining and counteracting the Local Attraction of the Mariner's Compass by day and by night on board all vessels (steamers included) at sea, or in a roadstead, and on land, with cases . . . to which is added a few practical hints on the Variation of the Compass and the utility of the Lead and Charts, with illustrations. 4to. 60 pp. *London*, 1837

Foucault, Jean Bernard Léon. *Born September* 19, 1819, *at Paris; died February* 11, 1868, *at Paris.*

Appareil destiné a rendre constante la lumière émanant d'un charbon placé entre les deux poles d'une pile. 4to. (*Comptes Rendus*, xxviii. 68. *Paris*, 1849

Rapport sur son Mémoire sur l'Appareil à lumière constante . . . par Dumas. 4to. (*Comptes Rendus*, xxviii. 120. *Paris*, 1846

† Appareil Photo-électrique. 4to. (*Comptes Rendus*, xxviii. 698.) *Paris*, 1849

† De la chaleur produite par l'influence de l'aimant sur les corps en mouvement. 4to. 2 pp. *Paris*, 1855

Etude sur le pendule à oscillations électro-continues. 8vo. 20 pp. *Amiens*, 1856

Rheotome. (*Vide Du Moncel.*)

(*Vide* also Fizeau and Foucault.)

Fourcroy, Antoine François de. *Born June* 15, 1755, *at Paris; died December* 16, 1809, *at Paris.*

Discours à la séance publique de l'Ecole de Médecine, Paris. 4to. *Paris*, 1801

† Memoir on the Stones which have fallen from the Atmosphere, and particularly near Laigle, in the department of L'Orne, on the 26th of April last. Read by C. Fourcroy in the Institute, June 19th, 1803. 8vo. 7 pp. (*Phil. Mag.* xvi. 299.) *London*, 1803

† Mémoire sur la nature de la fibre musculaire, et sur le siège de l'irritabilité. *Paris.*

(*Vide* also Vauquelin).

† **Fourcy,** E. de. Rapport sur Appareil de Prudhomme. (*Vide* Prudhomme.)

Fournet. Observations sur la distribution des Orages dans le département du Rhône. 8vo. *Lyon*, 1841

† Faits pour servir à la théorie de la Grêle. 4to. 10 pp. (*An. . . . Soc. Agricult.* vi. 131.) *Lyon*, 1843

Aperçus sur le magnétisme des minéraux et des roches. (*Ann. de la Soc. d'Agriculture, &c. de Lyon*, 1848.) *Lyon*, 1848

† **Fournet et Benoit.** Grêles du département du Rhône, Dégats, périodicité, directions des orages à grêles. 8vo. 95 pp. 2 plates. *Lyon*, 1869

Fowler, Thomas. *Born January* 22, 1736, *at York; died June* 22, 1801, *at York.*

A remarkable case of the morbid effects of Lightning successfully treated. (*Medical and Philosophical Commentary by a Society of Physicians in Edinburgh*, vol. vi.) *Edinburgh*

A case of an obstinate Quartan Ague cured by Electricity. (*Mem. Med. Soc. of London*, iii.)

† **Fowler**, Richard. Experiments and Observations relative to the influence lately discovered by M. Galvani . . . 8vo. 176 pp. *Edinburgh*, 1793

Fowler. (*Vide* Monro and Fowler.)

Fownes, G. Manual of Chemistry, by Jones and Hoffman. 8th edition. 12mo. *London*, 1861

Manual of Elementary Chemistry, theoretical and practical. 9th edition. Thick 12mo. 1863

Fox, R. W. Description and use of a Dipping-needle Deflector, invented by Robt. Were Fox, Esq. By T. B. Jordan, instrument maker. 8vo. 10 pp. 1 plate. (*Annals of Electricity.*) *London*

† On the variable intensity of Terrestrial Magnetism, and the influence of the Aurora Borealis upon it. 4to. 9 pp. (*Phil. Trans. for* 1831, p. 199.) *London*, 1831

† Notice of some experiments on Subterranean Electricity made in Penzance Mine, near Falmouth. 8vo. 6 pp. (*Trans. Royal Cornwall Polytechnic Society.*) *Falmouth*

† **Fozembas.** Mémoire sur l'électro-moteur. Dédié à MM. les Médecins. 8vo. 16 pp. *Paris*, 1833

† **Fragneau.** Appareil, accidents, chemins de fer. (*Vide* Abria.) *Bordeaux*, 1853

† **Franceschi**, G. La Elettricità animale nuovo elemento filosofico della medicina. 8vo. 96 pp. *Ancona*, 1841

Franchot. "Pendule a mouvement continu de M. Franchot."

Note.—This was applied to improve Foucault's illustration of the Earth's rotation. Moigno describes the principle, &c., but gives no notice of where and when it was first described.

† **Francis.** G. Electrical experiments, &c. 8vo. *London*, 1844

Electrical experiments. 5th edition. 8vo. 91 pp. Engravings and cuts. *London*, 1850

Franklin, Benjamin. *Born January* 17, 1706, *at Governor's Island, near Boston; died April* 17, 1790, *at Philadelphia.*

There are numerous editions and reprints of Franklin's Electrical works, &c. The date of his first letter is the 28th July, 1747. (*Vide Priestley, Hist.* 5th edition, p. 142.)

Letter concerning the Effects of Lightning. (*Phil. Trans.* 1751, p. 289.) *London*, 1751

New experiments and observations on Electricity, &c., in letters to and edited by Collinson. Part i. 4to. *London*, 1751

† Expériences et Observations sur l'Electricité. Traduit de l'anglais. 1st edit. 8vo. 222 pp. 1 plate. *Paris*, 1752

Letter concerning an Electrical Kite. (*Phil. Trans.* 1752, p. 505.) *London*, 1752

† New Experiments and Observations in letters to Collinson. Enlarged by Part ii. 1752

† New Experiments and Observations communicated to Collinson (and read at the Royal Society). To which are added a Paper, by Canton, and another (in Defence of Franklin against Nollet) by Colden. Part iii. 4to. 44 pp. *London*, 1754

† New Experiments and Observations in letters to Collinson. Enlarged by Part iii. 4to. 154 pp. 1 plate. *London*, 1754

Note.—This volume contains the second edition of Parts i. *and* ii., *and an edition not named of Part* iii. (*all dated* 1754). *The second letter of this second edition* (*to Collinson*) *should contain* (*at* p. 12) *a footnote which appeared in the first edition, wherein Franklin very kindly acknowledges a first suggestion by Hopkinson relative to the electrical property of Points in dissipating a charge. Kuhn* (*N. Entdeck. f.* 19) *refers to the* Experiment *of Hopkinson, and gives particulars not mentioned by Franklin, but no indication of where first described.*

Franklin, Benjamin—*continued.*

† New Experiments and Observations . . . in several letters to Collinson. Part II. 2nd edition. 4to. 23 pp. *London* (?) 1754

Supplemental Experiments. Part iii. 4to. *London* (?) 1754

Electrical Experiments, made in pursuance of those by John Canton, with explanation. 4to. (*Phil. Trans.* 1755, p. 300. *London*, 1755

† Expériences et Observations sur l'Electricité . . . Traduit de l'angloise. Revue, corrigée, et augmentée d'un supplément du même auteur, avec des notes et des expériences nouvelles, par M. D'Alibard. 2e édition. 2 vols. 12mo. 1 plate. *Paris*, 1756

† Briefe v. d. Elektricität a. d. Engl. 8vo. *Stockholm*, 1758

Briefe v. d. Elektricität uberst. nebst Anmerkungen von Wilcke. 8vo. xxiv. and 354 pp. 1 plate. *Leipzig*, 1758

An account of the effects of Electricity in paralytic cases. 4to. (*Phil. Trans.* 1758, p. 695.) *London*, 1758

† New Experiments and Observations on Electricity made at Philadelphia . . . and communicated in several letters to P. Collinson. Part i. 3rd edition. 4to. 86 pp. 1 plate. 1760

Physical and Meteorological Observations, Conjectures, and Suppositions. 4to. (*Phil. Trans.* 1765, p. 182.) *London*, 1765

New Experiments and Observations in letters to Collinson, enlarged by letters and papers on other subjects. 4to. 500 pp. 1766

† Experiments and Observations on Electricity . . . to which are added letters, &c., on Philosophical subjects; the whole corrected, &c. . . and now *first* collected into one volume. 4th edition. 4to. 496 pp. *London*, 1769

† Letter from Dr. B. Franklin to D. Hume, Esq., on the method of securing houses from the effects of Lightning. 8vo. 15 pp. *Edinburgh*, 1771

† Œuvres de Franklin, traduites de l'anglais, sur la 4e édition, par Barbeu Dubourg, avec des additions nouvelles. . . 2 vols. 4to. *Paris*, 1773

† Experiments and Observations on Electricity . . . to which are added letters and papers on Philosophical subjects. The whole corrected, &c. . . . and now collected into one volume. 5th edition. 4to. 514 pp. *London*, 1774

Political, Miscellaneous, and Philosophical pieces ("not contained in the preceding collection.") 4to. (*From advertisement to his Complete Works*, 1866.) 1779

Sämmtliche Werke, aus dem Engl. und Franz. übersetz. nebst, des franz. übersetzers B. Dubourg, Zusätzen, und mit einigen Anmerk. versehen von G. T. Wenzel." *Dresden*, 1780

Lettere di Beniamino Franklin a Giambattista Beccaria volgarizzate dal Conte Prospero Balbo. 8vo. 8 pp. *Torino*, 1783

Note.—There are six letters printed at the end of Eandi's "Memorie istoriche intorno gli studi del Padre Giam. Beccaria."

† Opere filosofiche di B. Franklin nuovamente raccolte, e dall' originale Inglese recate in lingua Italiana. 8vo. 125 pp. 3 plates. *Padova*, 1783

Philosophical and Miscellaneous Papers. 8vo. 1787

Erweitertes Lehrgebäude der natürlichen Elektricität. 8vo. *Wien*, 1790

† Conjectures concerning the formation of the Earth, &c., in a letter to the Abbé Soulavie, Sept. 22, 1782. 4to. 5 pp. (*Trans. Amer. Phil. Soc.* iii. 1.) *Philadelphia*, 1793

† Queries and Conjectures relative to Magnetism, and the theory of the Earth; in a letter to Mr. Bodain, read Jan. 15, 1790. 4to. 4 pp. (*Trans. Amer. Phil. Soc.* Old Series, vol. iii. p. 10.) *Philadelphia*, 1793

Franklin, Benjamin—*continued.*

Meteorological Imaginations and Conjectures. (*Mem. of the Soc. Manchester.*) *Manchester*

Works. 2 vols. 12mo. (*From Watt.*) *London*, 1793

† The complete Works of B. Franklin. 3 vols. 8vo. 1806

Works, Political, Philosophical, and Miscellaneous, with his Memoirs of his Life, and Private Correspondence. 6 vols. 8vo. 1818

Franklin's Memoirs, Posthumous and other Writings, by W. T. Franklin. 3 vols. 4to. (*From Phil. Mag.* p. 61.) 1819

Autobiography and Life, by H. H. Weld. Illustrated. 8vo. *London*, 1849

Works of, with Notes and Life, by Jared Sparks. New edition. 10 vols. 8vo. *Boston, U.S.*, 1850

Autobiography of, by Jared Sparks. *Boston, U.S.*, 1856

Autobiography. Edited from his manuscript, by J. Bigelow. 8vo. *Philadelphia*, 1868

Works. 2 vols. 8vo. (*From Young*, ii. 112.) *London*

Works, consisting of his Life, &c. 2 vols. 12mo. (*From Watt.*)

Franklin's Memoirs, Posthumous and other Writings, by W. T. Franklin. New edition. 8vo. (*From Watt.*)

† Portrait by lithograph. Lit. di G. Ricordi, P. Fontana.

† **Franklin**, B. and others. Rapport des Commissaires chargés par le Roi de l'examen du Magnétisme animal. The signatures are Franklin, Majault, Le Roy, Sallin, Bailly, D'Arcet, De Bory, Guillotin, and Lavoisier. 4to. 66 pp. *Paris*, 1784

† Report of Dr. B. Franklin and other Commissioners, charged by the King of France with the examination of the Animal Magnetism . . . Translated from the French, with an historical introduction. 8vo. 108 pp. *London*, 1785

Franklin, C. Erweitertes Lehrgebäude der Elektricität. 8vo. *Wien*, 1790

Franklin-Institut. Journal of the Franklin Institut. of the State of Pennsylvania for the promotion of the Mechanical Arts. 1st series, 1826-27, 4 vols.; 2nd, 1828-1840, 26 vols.; 3rd, 1841-1856, 32 vols. 8vo. *Philadelphia*, 1826-56

Franklin, Sir John. *Born April* 16, 1786, *at Spilsby; died June* 11, 1847, *at Point Victory, on the north-west coast of King William IV. Island.*

Franklin, Georg. Declaratio phænomenorum juxta methodum scholasticam. *Oenipont*, 1747

De electricitate ejusque phenomenis. *Oenipont*, 174—

Franz, Jh. Dissertatio de natura Electri. *Vindob.* 1751

Frauenhofer, Joseph. *Born March* 6, 1787, *at Straubing; died June* 7, 1826, *at Munich.*

On Lines, &c., in the Electric Spectra. (*Abhandlungen der K. Bayerischen Akad. der Wissenschaften*, 1814 *e* 1815.) *München*, 1814 *or* 1815

Détermination du pouvoir réfringent et dispersif, &c. (*From Dove*, 227.)

Frecksel. Bemerkungen über Blitzschläge. 1819

† **Fredholm**, K. A. Om meteorstenfallet vid Hessle den 1 Januari 1869. 8vo. 43 pp. *Upsala*, 1869

Freitel. Télégraphe imprimeur. (*From Du Moncel.*) 1855

† **Freke**, John. An Essay to show the Cause of Electricity, &c. . . . In a letter to Mr. W. Watson. 8vo. 64 pp. *London*, 1746

† Treatise on the nature . . of Fire, in Three Essays. I. Showing the Cause of Vitality. . . . II. On Electricity. III. Showing the Mechanical Cause of Magnetism. . . 196 pp. 8vo. *London*, 1752

(*Vide* also Anon. Elect. 1748.)

† **Fremery**, N. C. Dissertatio philos. inauguralis de Fulmine. 4to. 96 pp. 1 plate. *Lugdini, Batav.* 1790

Frémy, Edmond. *Born Feb.* 28, 1814, *at Versailles.*

† Sur l'Oxygène et l'Ozone. Deuxième Conférence du 10 Avril, 1866, sous le patronage de l'Impératrice. Au bénéfice de la Société de Secours des Amis des Sciences, fondée par le Bn. Thénard. 8vo. 32 and 50 pp. *Paris*, 1866

† **Fremy et Ed. Becquerel.** Recherches électro-chimiques sur les propriétés des corps electrisés. 8vo. 44 pp. 1 plate. *Paris*, 1852

French Meteorological Society. Annuaire de la Société météorologique de France. *Paris*, 1857

Frenzel, J. S. T. De Torpedine veterum genere raia. 4to. *Wittenberg*, 1777

Fresnel, Aug. Œuvres complètes publ. par MM. Henri de Sénarmont, Edm. Verdet, et L. Fresnel. 3 vols. 4to. *Paris*, 1868-70

Fresnel, A. J. Sur les essais ayant pour but de décomposer l'Eau avec un aimant. 8vo. (*Annales de Chim. et Phys.* xv. 1820.) *Paris*, 1820

Fresnel. (*Vide* Du Fresnel.)

Freycinet, Claude Louis Desaulses de. *Born Aug.* 7, 1779, *at Montélimart; died Aug.* 18, 1842, *at Landgut Freycinet, near Loriol, dép. Drôme.*

Voyage de découvertes aux Terres Australes sur les corvettes le Géographe, &c. . . pendant . . 1800-1-2-3-4 sous le command du Capt. de vaisseau N. Baudin.

Navigation et Géographie . . redigé par M. Louis Freycinet. 4to. *Paris*, 1815

(*Vide* also Peron and Freycinet.)

† Account of the French voyage of Discovery and Circumnavigation performed in 1818, 1819 and 1820. (*Phil. Mag.* lvii. 20.) 8vo. 9 pp. *London*, 1821

† Voyage autour du monde sur les corvettes l'Uranie et la Physicienne pendant . . 1817, 1818, 1819 and 1820. Magnétisme terrestre. 4to. 342 pp. 1 map. *Paris*, 1842

Freygang, W. Von. Gedanken über die Luftsteine a.d Franz. *Göttingen*, 1805

Friberg, O. Dissertatio gradualis de pyxide nautica: præside A. Celsio. 4to. *Upsaliæ*, 1743

Friedlander. Expérience avec l'appareil galvanique de Volta. *Paris*, 1801

(*Vide* also Pfaff, C. H.)

† **Friesach**, K. Geographische und magnetische Beobachtungen in Nord- und Süd-Amerika, angestellt in den Jahren 1856 und 1857 . 44 pp. (*Sitzungsberechte der Wien Acad.*, vol. xxix. No. 9.) *Wien*, 1856-7

† Astronom u. magnet. Beobachtungen in Amerika angestellt 1857, 1858, und 1859. 8vo. 42 pp. (*Wiener Sitzungsberichte*, 1852.) *Wien*, 1859

Friese. Theoria Galvanismi. 8vo (*From Dove*, p. 205.) *Bonn*, 1842

Frieten. Theoria Galvanismi. (*From Lemperts Cat.* No. lxxxiv. 1867.) *Bonnæ*, 1842

Frisi, Paolo. *Born April* 13, 1728, *at Milan; died Nov.* 22, 1784, *at Milan.*

Nova electricitatis theoria. *Milano*, 1755

Una sua lettera al Dott Lami. *Firenze*, 1755

† De existentia et motu Ætheris seu de theoria electricitatis, ignis, et lucis. Dissertatio. 4to. 66 pp. 1 pl. *Petropoli*, 1755

† De causa electricitatis. Dissertatio. 8vo. *Petrop. et Lucæ*, 1757

Dissertationum variorum . . in quo habentur (No. 3.) De natura et motu Ætheris . . . quærum specimen anno 1755. Imps. Petropolitanæ Scient. Acad. jussu et suffragio editum est (p. 178, part i.), et De Electricitate (p. 212, part ii.) 2 vols. 4to. *Lucæ*, 1759 *and* 1761

† Opuscoli filosofici. 8vo. 118 pp. (*Consists of five writings; the second only electric, viz.*, "*Dei Conduttori Elettrici*," 22 pp.) *Milano*, 1781

Opera. 3 vols. 4to. 1782

† Operette scelte di Paolo Frisi Milanese, con le Memorie Storiche intorno al medesimo scritte da Pietro Verri. 12mo. 419 pp. Portrait. (*Trans.* vol. clxiii. *of the* "*Biblioteca scelta di Opere Italiane antiche e moderne*, p. 26, "*Dei Conduttori Eletrici.*") *Milano*, 1825

(*Vide* also Euler, Frisi and Beraud.)

† **Frisiani**, P. Memoria di Gauss tradotta, &c.

† Ricerche sul Magnetismo terrestre. Memoria (*Prima Letta* 10 *maggio*, 14 *Giugno e* 23 *Agosto* 1860.) Printed in 1860. 4to. 35 pp. (*Memorie del R. Istit. Lomb.* viii.) *Milano*, 1860?

† Sulle sue "Ricerche sul Magnetismo terrestre." 4to. 1 p. (*Atti dell' I. R. Istit. Lomb.* ii. 98 & 101.) *Milano*, 1860

† Ricerche sul Magnetismo terrestre. (*Memoria Seconda. Letta* 22 *Agosto*, 21 *Novembre, e* 5 *Decembre* 1861, 9 *e* 23 *Gennaio* 1862.) 36 pp. (*Memorie del R. Istit. Lomb.* ix.) *Milano*, 1862 (?)

Fritch. (*Vide* Kreil.)

† **Fritsch**, K. Von. Ueber die Störungen des täglichen Ganges einiger der wichtigsten meteorologischen Elemente an Gewittertagen. 8vo. 75 pp. 1 plate. (*Aus. den Sitzungsberichten* 1859 *der k. Akad. der Wissenschaften*, xxxviii. *Bde.* 633.) *Wien*, 1860

† Üb. d. Mitwirkung elektr. Ströme bei d. Bildung einiger Mineralien. Inaugural Dissertation. 8vo. 51 pp. *Gottingen*, 1862

4 Abhandl. über Gewitter u. Orkane. 8vo. (*Wien. Akad.*) *Wien*

Frobesius, Johann Nicolaus. (*Born January* 7, 1701, *at Goslar; died September* 11, 1756, *at Helmstädt.*)

† Nova et antiqua luminis atque Aurora-borealis spectacula. 4to. 160 pp. *Helmstadii*, 1739

Froment. Sur un instrument électrique à lame vibrante. 4to. (*Comptes Rendus*, xxiv. 428.) *Paris*, 1847

M. Ponillet donne de vive-voix quelques détails sur la construction d'un télégraphe électrique, soumis par M. Froment au jugement de l'Académie. 4to. (*Comptes Rendus*, xxx. 562.) *Paris*, 1850

"Compteurs électro-chronométriques de M. Froment." (*From Du Moncel and Moigno.*)

"Im J. 1852 im Auftrage der Sardinischen Regierung einen dem Morse'schen Telegraphen ähnlichen Schreib apparat construirt." 8vo. (*Polytech. Jour.* clix. 173.) *Stuttgart*, 1853

Electro-moteurs. (*From Du Moncel.*)

† **Frommhold**, C. Der constante galvanische Strom modificirbar in seinem Intensitäts- und Quantitätswerth. Nachtrag zur Electrotherapie von C. Frommhold. 8vo. 66 pp. *Pesth*, 1867-67

Fromondi, L. Meteorologicorum libri sex. 1st edition. 4to. *Antverpiæ*, 1627
(*Libri Sale Cat.* p. 328, *says he employed pulsations of the heart to calculate the distance of Thunder.*)

Froriep, Ludwig Friedrich von. *Born January* 15, 1779, *at Erfurt; died July* 28, 1847, *at Weimar.*

Dissertatio de methodo neonatis asphyeticis succurrendi. *Jenæ*, 1801

Notizen aus d. Gebiet d. Natur-und-Heilkunde. 50 vols. 4to.
Weimar, 1822-36

† **Froriep,** L. F. and **Froriep,** R. Neue Notizen, id. 40 vols. 4to.
Weimar, 1836-45

Froriep, R. Beobachtungen über die Heilwirkung der Electricität bei Anwendung des magneto-electrischen Apparates. Erstes Heft. Die rheumatische Schwiele. 8vo. 292 pp. *Weimar*, 1843

† On the therapeutic application of Electro-magnetism to the treatment of rheumatic and paralytic affections, translated from the German by R. M. Lawrance. 8vo. 205 pp. *London*, 1850

Electro-magnetism in Rheumatic affections. 2nd edition. 8vo. *London*, 1852

Frytsch, M. De Meteoris, cum emendat. J. Hagii. 8vo. *Witeb.* 1583

Fuchs, J. C. Von einem merkwürdigen Wetterschlage in Potsdam. (*Allerneueste Mannigfaltigkeiten* 1782.) 1782

Zusätze und Ergänzungen der Nachricht von einem merkwürdigen Wetterschlage in Potsdam. . . . (*Allerneueste Mannichfaltigkeiten*, J. ii. Th. iii.)

Fulgenzio. (*Vide* Daven Fulgenzio.)

Fulke (or Fulco), Dr. W. A goodly gallery with a most pleasaunt Prospect into the garden of naturall Contemplation, to beholde the naturall causes of all kind of Meteors, as well fyery and ayrey, as watry & earthly, &c. &c. 8vo.
London, 1571

A goodly gallery with a most pleasaunt Prospect into the garden of naturall Contemplation, to beholde the naturall causes of all kind of Meteors, as well fyery & ayrey, as watry & earthly, &c. &c. 8vo. *London*, 1634

Meteors, or a plain Description of all Kinds of Meteors, as well Fiery as Airey, as Watry as Earthly. 12mo. 1670

† **Fuller,** Jn. jun. A letter from J. F. to Sir Hans Sloane, Bart., concerning the Fire Ball seen and described by Lord Beauchamp, in Sussex. 4to. 2 pp.
(*Phil. Trans.* xli. 871.) *London*, 1739-40-41

Funk, Christlieb Benedict. *Born July* 5, 1736, *at Hartenstein, Grafschaft Schönberg; died April* 10, 1786, *at Leipzig.*

Die nördliche und südliche Erdoberfläche auf die Ebene des Aequators projicirt. *Leipzig*, 1781

Furstenau, J. H. De electricitate. Programma. 4to. *Rintel*, 1744

Fusinieri, Ambrogio. (*Born July* 9, 1773, *at Vicenza; died January* 14, 1853, *at Vicenza.*)

Nuovi fenomeni magnetici. 4to. (*Giorn. di Fisica, &c.* Dec. ii. vol. v. 1822.)
Pavia, 1822

Sopra il trasporto di materia ponderabile nelle scariche elettriche. 4to.
(*Giornale di Pavia, Bimestre* vi. 1825.) *Pavia*, 1825

Singolari effetti prodotti da una scarica di elettricità atmosferica. 4to.
(*Giorn. di fisica, etc., Dec.* ii. vol. ii.) *Pavia*, 1825

† Sopra il trasporto di materia ponderabile nella folgore. 4to. 19 pp. (*Giornale di Pavia, Bimestre* v. 1827.) *Pavia*, 1827

Fusinieri, Ambrogio—*continued.*

† Aggiunta di nuove osservazioni, istituite, anche sulle piante, alla Memoria sopra il trasporto di materia ponderabile nelle folgori. 4to. 8 pp. (*Giornale di Pavia, Bimestre* vi. 1827.) *Pavia*, 1827

Estratto di alcune Memorie sopra il trasporto di materia ponderabile nelle scariche elettriche dello macchine ordinarie e nelle folgori, e conseguenze che ne derivano contro la teoria degli imponderabili, del Dott A. . F. . 8vo. 38 pp. (*Giorn. delle Ital. Letter. del Da Rio*, vol. lxv. p. 155.) *Padova*, 1828

† Memoria iii. Sopra il trasporto di materia ponderabile nelle Folgori. 4to. 14 pp. (*Ann. del Reg. Lomb.-Veneto*, vol. i. 291. *Continuazione della Memoria* iii. . .) *Padova*, 1831

† Annali delle scienze del Regno Lombardo-Veneto. Opera periodica di alcuni collaboratori. 4to. (*Nearly all Articles on Electricity in Library.*) *Padua, Vicenza & Venezia*, 1831-45

(*Note.—This Journal is called "in un certo modo, una continuazione. . . del Giornale di Pavia. (dei) Configliachi e Brugnatelli."*)

† Estratto di alcune Memorie pubblicate negli anni 1826-27 e -30 dal Nobili sopra i Colori che acquistano i metalli sotto l'azione della pila di Volta, &c. . . 4to. 5 pp. (*Ann. Sci. Reg. Lomb.-Veneto*, i. 165.) *Padova*, 1831

† Breve notizia di nuovi Esperimenti elettro-magnetici del Prof. Dal Negro. 4to. 3 pp. (*Ann. del Reg. Lomb.-Veneto*, i. 278.) *Padova*, 1831

Remarks on Matteucci, Marianini, and Namis (Namias?) "sopra la scossa elettrica delle rane." 4to. (*Fusinieri's Annali*, i. 342, 2nd part.) *Padova*, 1831

† Nota. (Sopra Esperienze del Dal Negro nei giorni 30 e 31 Marzo 1832.) 4to. 3 pp. (*Ann. del Reg. Lomb.-Veneto*, ii. 106.) *Padova*, 1832

† Sopra la nuova Batteria magneto-elettrica del Sig. Prof. Dal-Negro. Notizia del Direttore di questi Annali. 4to. 2 pp. (*Ann. del Reg. Lomb.-Veneto*, ii. 139.) *Padova*, 1832

† Sopra il magnetismo di movimento; e risultati di alcuni esperimenti. . . 4to. 18 pp. (*Ann. del Reg. Lomb.-Veneto*, ii. 189.) *Padova*, 1832

† Risposta alla Lettera del Zamboni. 4to. 3 pp. *Padova*, 1834

† (Notizia sulle) Nuove osservazioni sopra le apparenze elettro-chimiche. Del Prof. L. Nobili. Firenze, 24 Dicem. 1833.

† (Sopra) Note sul magnetismo. Del Prof. L. Nobili. Firenze, 10 e 14 Gennaio, 1834. 4to. 7 pp. (*Ann. del Reg. Lomb.-Veneto*, iv. 164 and 167.) *Padova*, 1834

† Sopra la grandine straordinaria caduta in Padova nel giorno 26 Agosto di quest' anno. Nota. (*In Ann. del Reg. Lomb.-Veneto*, iv. 236.) *Padova*, 1834

† Risposta ad un Opuscolo stampato (Settem. 1834) a Firenze dal F. Rossellini sopra un articolo del Fusinieri nel 2do. Bimestre, 1834, degli Ann. della Scienza del Reg. Lomb.-Veneto. 4to. (*Ann. del Reg. Lomb.-Veneto*, iv. Fasc. v.) *Padova*, 1834

† Relazione di alcune esperienze del Magrini. 4to. 4 pp. (*Ann. del Reg. Lomb.-Veneto*, v. 220.) *Padova*, 1835

† Della influenza reciproca di più calamite, riguardo all' intensità dei loro magnetismi, &c. (*Ann. della Scienza del Reg. Lomb.-Ven.* tom. v.) *Padova*, 1835

† Memoria sul Magnetismo temporario delle barre di ferro dolce, per influenza del magnetismo terrestre; sulle loro posizioni di neutralità; e sopra qualche altra esperienza magnetica. 4to. 15 pp. 1 plate. (*Ann. del Reg. Lomb.-Veneto*, v. 306.) *Padova*, 1835

† Risposta alla lettera 2da. del Zamboni sulla teoria elettro-chimica delle pile voltiane. 4to. 11 pp. (*Ann. del Reg. Lomb.-Veneto*, vi. 31.) *Padova*, 1836

Fusinieri, Ambrogio—*continued.*

† La pila del Zamboni d'accordo colla teoria elettro-chimica. Memoria in risposta anche ad un opuscolo del Zamboni "*sull' argomento delle pile secche contro la teoria elettro-chimica. Verona*, 1836." Parte i. 28 pp. e ii. 22 pp. (*Ann. del Reg. Lomb.-Veneto*, vi. 293.) *Padova*, 1836-37

† (Sopra lo scritto) "*Sulle proprietà elettriche ed elettro-fisiologiche della torpedine; del padre Santi Linari.*" (Indicatore Sanese No. 50, 13 Dec. 1836.) 4to. 3 pp. (*Ann. del Reg. Lomb.-Veneto*, vii. 123.) *Padova*, 1837

† Scintilla elettrica tratta dalla pila termo-elettrica dall' Antinori e dal Santi Linari. 4to. 1 page. (*Ann. del Reg. Lomb.-Veneto*, vii. 131.) *Padova*, 1837

† (Analisi della Memoria del Marianini.) "*Sulla teoria degli elettromotori. Memoria* iv. *Esame di alcune esperienze addotte dal Faraday per provare che la elettricità voltaica nasce dall'azione dei liquidi sui metalli, ec. Modena*, 1837. 4to. 11 pp. Continuazione e fine dell' analisi di una Memoria del Marianini. 4to. 32 pp. (*Ann. del Reg. Lomb.-Veneto* vii. 192 and 262. *Padova*, 1837

† (Notizia di.) "Sulla dispersione delle due elettricità" del Belli. (*Bibl. Ital. tomi* 85 *e* 86.) 4to. 2 pp. (*Ann. del Reg. Lomb.-Veneto*, vii. 203.) *Padova*, 1837

† Risposta . . ad un articolo inserito nella Biblioteca Universale, Jan. 1836, 196, circa le esperienze del Belli sulla dispersione delle due elettricità. (*Ann. del Reg. Lomb.-Veneto*, viii. 134.) *Padova*, 1838

† Circa la elettricità della Torpedine o di tutti gli animali in generale secondo il Matteucci. 4to. 3 pp. (*Ann. del Reg. Lomb.-Veneto*, viii. 239.) *Padova*, 1838

† Sopra la costituzione della scintilla elettrica; riflessioni in confronto di alcuni articoli del "Corso elementare di Fisica" del G. Belli. 4to. 6 pp. (*Ann. del Reg. Lomb.-Veneto*, viii. 284.) *Padova*, 1838

† Notizia (dell'opera). Sulle proprietà delle correnti magneto-elettriche (di) De la Rive (nella) Bibliothèque Univers. 1838, Mars, p. 134, et Avril, p. 366. 4to. 4 pp. (*Ann. del Reg. Lomb.-Veneto*, viii. 290.) *Padova*, 1838

Delle correnti elettriche secondarie costituite elementi ponderabili, e dipendenti dalla forza di espansione della materia attenuata. 4to. (*Fusinieri's Annali*, ix. 1.) *Venezia*, 1839

Reflessioni sopra il Magnetismo transversale prodotto dalle correnti elettriche. 4to. 7 pp. (*Fusinieri's Annali*, ix. 19.) *Venezia*, 1839

Sopra un nuovo apparecchio del Sig. Gauss per le osservazioni della intensità del magnetismo terrestre Riflessioni. 4to. 4 pp. (*Fusinieri's Annali*, ix. 75.) *Venezia*, 1839

Sulle variazioni delle forze delle calamite per le loro influenze reciproche, e sulle calamite composte. 4to. 4 pp. (*Fusinieri's Annali*, ix. 79.) *Venezia*, 1839

† Circa i principii generali del magnetismo tranversale prodotto dalle correnti elettriche. Discussione del Fusinieri; con Risposta a due Articoli del Zantedeschi nella Gazzetta di Venezia 13 e 27 Mag. 4to. 28 pp. *Venezia*, 1839

† Esame dei fondamenti della teoria matematica dell' elettro-magnetismo. Matematico lettere ad suo. 4to. 10 pp. *Padova*, 1840

† Discussione esperimentale sulle leggi delle attrazioni e repulsioni elettro-magnetiche, e della loro differenza dalle deviazioni scoperte da Œrstod. (Appendice A, p. 29.) 4to. 29 pp. (*Ann. del Reg. Lomb.-Veneto*, tom. x.) *Padova*, 1840

† Incidente avvenuto a causa dell'esame dei fondamenti della teoria matematica dell' elettro-magnetismo, intrapreso da A. Fusinieri nel Bim. ii. 1840 degli Annali. 4to. xii. pp. (*Ann. del Reg. Lomb.-Veneto*, x.) *Vicenza*, 1840

Risposta . . ad una lettera del G. Bellavitis nel Poligrafo di Nov. e Dec. 1840. 4to. 18 pp. (*Fusinieri' Annali*, vol. x.) *Venezia*, 1840

Fusinieri, Ambrogio—*continued.*

† Sopra alcuni fenomeni meteorologici che hanno rapporto collo sviluppo di elettricità o del calorico nativo dei corpi. Memoria. Ricevutta di 12 Decembre, 1837. 4to. 28 pp. (*Mem. Soc. Ital.* xxii. 48.) *Modena*, 1841

† Sopra il trasporto di materia ponderabile nelle scariche elettriche. Memoria Estratta dal Giornale di fisica ec. di Pavia, Bim. vi. Seconda edizione in Appendice al Bim. vi. 1842, degli Annali delle Scienze del Regno Lombardo-Veneto. 4to. 11 pp. *Padova*, 1843

† Sul termo-elettricismo del mercurio. Del moto vorticoso o a spirale scoperto dal Prof. Zantedeschi nell'arco luminoso fra due punte di carbone collocate ai poli della pila. 4to. 1 page. (*Ann. del Reg. Lomb.-Veneto* xiii. 217.) *Vicenza*, 1844

† Memorie sperimentali di meccanica molecolare. 4to. 310 pp. 6 plates. *Padova*, 1844

† Sopra alcuni effetti meccanici delle correnti galvaniche. 4to. 15 pp. (*Ann. del Regno Lomb.-Veneto*, xiv. 183.) *Vicenza*, 1845

† Sulle ossidazioni interne delle coppie saldate di zinco e di ram che entrano a componere la pila di Volta. Memoria. 4to. 15 pp. (*Ann. del Reg. Lomb.-Veneto*, xiv. p. 243.) *Vicenza*, 1845

† Memorie sopra la Luce, il Calorico, la Elettricità, il Magnetismo, l'Elettro-Magnetismo ed altri oggetti. 4to. 354 pp. *Padova*, 1846

† Memorie di Meteorologia. 4to. 251 pp. Tables. *Padova*, 1847

† Biografici cenni sopra Ambrogio Fusinieri, di Capparozzo. 8vo. 36 pp. *Vicenza*, 1854

† Elogio di Ambrogio Fusinieri, letto all'Accad. Olimpica di Vicenza, 4 Feb. 1855 dal Dr. F. S. Beggiato, Presidente. 4to. 29 pp. *Vicenza*, 1855

(*Vide* also Zamboni and Fusinieri.)

Fuss, Nicolaus von. *Born January* 30, 1755, *at Basle; died January* 4 (*N. St.*) 1826, *at St. Petersburg.*

† Observ. et Expér. sur les Aimants artificiels, principalement sur la meilleure manière de les faire. 4to. 2 plates. 38 pp. (*Acta Petrop.* ii. 35.) *Petersburg*, 1778

Futerand, Ponzin. De l'influence d'un Orage sur trois Epilepsies vermineuses. 8vo. (*Montpellier, Acad. Recueil des Bulletins*, vol. vi. p. 345.) *Montpellier*, 1815 ?

G.

G., W. M. (*Vide* **Anon. Electricity.** **1823**

G., S. (*Vide* **Anon. Electricity.**) **1838**

Gabler, Matthias. *Born February* 24, 1736, *at Spalt, Franken; died March* 30, 1805, *Wembdingen.*

Theoria Magnetis. 8vo. (*From Young*, p. 437.) *Ingolst.* **1781**

Gachet. Notice sur deux Météorolites-Echantillons. (*From Bordeaux Acad.*) *Bordeaux*, **1738**

Gadd, Peter Adrian. *Born April* 12, 1727, *at Birkala; died August* 11, 1797, *at Abo.*

De originaria corporum electricitate. 4to. *Aboæ*, **1769**
(*Note.—Poggendorff*, i. 826, *says*: "*Obss. chimico-physicæ de originaria corporum mineralium electricitate.*")

† **Gaeta** R. Lettera ad un suo amico, sulle scariche elettriche senza arco conduttore. 4to. 12 pp. (*Opusc. Scelt.* vi. 247.) *Milano*, **1783**

Gaiffe. Constructed a little apparatus by which a small pump can be set in motion by an electro-magnetic motor. (*From Carl*, p. 287.)

Gaillard. Expériences galvaniques. (*Mém. de la Société médicale d'Emulation*, i. 235.) *Paris*

† **Gaimard, P.** Voyages en Scandinavie, &c., pendant les années 1838-39-40 sur la Recherche . . . *Magnétisme terrestre*, par Lottin, Bravais, Lillichook, Siljestrom, Meyer, Delaroche, Poncié, le Capitaine Tabvere, &c. 3 vols. 4to. 8 plates. *Paris*

† Voyages en Scandinavie, &c., pendant les années 1838-39-40 sur la Recherche. *Aurores boréales*, par Lottin, Bravais, Lillichook, et Siljestrom. 1 vol. 4to. 12 plates. *Paris*

† Voyages en Islande et Groenland, pendant les années 1835 et 1836 sur la Recherche. *Physique*, par M. Victor Lottin. 1 vol. 4to. *Paris*, **1838**

Galilei, Galileo. *Born February* 18, 1564, *at Pisa; died January* 8, 1642, *at Arcetri, Tuscany.*

Opere. 3 vols. 4to. (*From Arago's Sale Cat.* p. 63.) *Firenze*, **1718**

Opere di. (Tom. iii. p. 355. A letter dated November 16, 1607, on a piece of Loadstone.) (*Zantedeschi in Bibliot. Ital.* lxxxvi. 135.) *Padua*, **1744**

Galizi, D. Dissertazione dell' Aurora-boreale. 12mo. (*Calogera Nuova Raccolta* xxxix. 64.) *Venezia*

† **Galle, J. G.** Über die am 11 Decbr., 1852, in Schlesien beobachtete Feuerkugel. 4to. 7 pp. (*Acad. Breslau*, 1853, p. 187.) *Breslau*, **1853**

† Über die Bahn des am 30 Januar, 1868, beobachteten und bei Pultusk im Königreiche Polen als Steinregen niedergefallenen Meteors durch die Atmosphäre. 8vo. 41 pp. *Breslau*, **1868**

† Katechismus der elektrischen Telegraphie. 8vo. 191 pp. *Leipzig*, **1855**

Katechismus der elektrischen Telegraphie. 2. Vermehrte und verbesserte Auflage. 8vo. 212 pp. *Leipzig*, **1859**

Katechismus der elektrischen Telegraphie. 3. Vermehrte und verbesserte Auflage. 8vo. 232 pp. *Leipzig*, **1864**

† **Galle, Ludw.** Katechismus der elektrischen Telegraphie. Von Ludw. Galle Vierte wesentlich verm u. verb. Aufl. bearb. v. Prof. Dr. Karl Ed. Zetzsche. 4to. 372 pp. *Leipzig*, **187C**
(*This forms part, No.* 21, *of Weber's Illustrirte Katechismen.*)

† **Galle**, M. Beyträge zur Erweiterung und Vervollkommnung der Elektricitätslehre. 8vo. 280 pp. 3 plates. *Salzburg*, 1813

Beiträge zur Erweiterung . . . der Elektricitätslehre. 2 vols. 8vo. (*From Dove*, p. 216.) *Salzburg*, 1816

† **Galletti**, B. et **Jounin**, A. De l'électricité en général et de ses applications en particulier. *Première Partie.* 8vo. 31 pp. *Paris*, 1844

Gallini, Stefano. *Born March* 22, 1756, *at Venice; died May* 26, 1828, *at Padua.*

† Se e quanto il fluido elettrico o galvanico influisca nella produzione de' fenomeni della vita, sopra tutto ne' corpi animali. Memoria. Ricevuta li 12 Giugno, 1819. 4to. 22 pp. (*Mem. della Soc. Ital.* xviii. 232.) *Modena*, 1820

Gallitzin, Dmitri Alexewitsch Fürst. *Born December* 21, 1738, *in Russia; died March* 21, 1803, *at Brunswick.*

Method of distinguishing the Pos. and Neg. states of Electricity by means of "poudre de *résine* répandue sur un carreau de verre." 4to. (*Mem. de l'Acad. Imp. et Roy. de Bruxelles*, tom. iii. p. 14. *Bruxelles*

(*Note.—Is this the experiment described by him in his* "Lettre sur quelques objets de l'Electricité, 1778"?)

† Lettre sur quelques objets d'Electricité addressée à l'Académie Imple. des Sciences de St. Pétersbourg. 4to. 16 pp. (*Accad. Petrop.*) *Petersburg*, 1778

† Lettre sur quelques objets de l'Electricité. 4to. 10 pp. 1 plate. (*Volta's copy.*) *La Haye*, 1778

† Nuovo fenomeno dell' Elettricità. 4to. 1 p. (*Opusc. Scelti*, ii. 305.) *Milano*, 1779

Sendschreiben a. d. Akad. zu St. Petersburg, über einige Gegenstande d. Elektr. 8vo. 3 plates. *Munster*, 1780

Sur l'Electricité. 4to. (*Journ. de Phys.* xxi. 1782.) *Paris*, 1782

Sur la forme des conducteurs électriques. 4to. (*Journ. de Phys.* xxii. 1783.) *Paris*, 1783

Sur quelques expériences de M. Achard. 4to. (*Journ. de Phys.* xxii. 1783.) *Paris*, 1783

† Observations sur les conducteurs. Addressée à l'Acad. de Bruxelles. Date July 6, 1778, La Haye. 4to. 10 pp. 1 plate. (*Volta's copy.*) *La Haye*, 1778 ?

† Observations sur l'Electricité naturelle par le moyen d'un Cerf Volant. 4to. 6 pp. 1 plate. (*Addressée à l'Acad. de Petersb. Date September* 25, 1778.) (*Volta's copy.*)

Gallucci, G. P. Modus fabricandi horaria mobilia permanentia cum acu magnetica. *Venet.* 1596

† **Galton**, F. The Telotypo, a printing electric Telegraph. 8vo. 32 pp. 4 plates. *London*, 1850

Galvani, Luigi (Aloisio). *Born September* 9, 1737, *at Bologna; died December* 4, 1789, *at Bologna.* (*Pogg.* i. 839.)

† Propositiones de Electricitate, &c. 4to. 23 pp. 1 plate. *Bononiæ*, 1786

† De viribus electricitatis in motu musculari. Commentarius: cum *Aldini* dissertatione et notis. 4to. 80 pp. 3 plates. *Mutinæ*, 1792

† Lettera al Carminati sull' elettricità animale. 8vo. 15 pp. (*Giorn. Fis. Med.* ii. 131.) *Pavia*, 1792

† Transunto della dissertazione del . . . Galvani . . . sulle forze dell' Elettricità nei moti muscolari. 4to. 29 pp. 1 plate. (*Opusc. Scelt.* xv. 113.) *Milano*, 1792

(*Note.—This translation is by Soave, who adds footnotes, the last of which contains:* "*Articolo di lettera, degli* 8 *Marzo* (1792), *dell' Aldini.*")

Abh. ü. d. Kräfte d. their Elekt. auf d. Bewegung d. Muskeln u.d. Schriften v. Valli, Carminati u. Volta üb. diesen Gegenstand. überst. v. J. Mayer. 8vo. *Prague*, 1793

Galvani, L.—*continued.*

Dell' uso e dell' attività dell' arco conduttore nelle contrazioni dei muscoli. 8vo. 168 pp. *Bologna*, 1794

Note.—This was erroneously supposed to be Aldini's work. The Supplement is not dated. It must have been printed in 1794, *or before the* 12*th January*, 1795, *for F. Caldani, in his* "Lettera . . circa le nuove ricerche" . . *dated* 12*th January*, 1795, *refers to it.* (*Vide Aldini.*)

† De viribus electricitatis in motu musculari. Commentarius. 4to. 56 pp. 4 plates. (*Comment. Bonon. Scient.* vii. 363.) *Bononiæ*, 1796

† Memorie sulla elettricità animale . . al L. Spallanzani . . Aggiunte alcune elettriche esperienze di G. Aldini. 4to. 105 and 3 pp. 2 plates. (*Brugnatelli's copy.*) *Bologna*, 1797

Memorie . . alli Spallanzani per le Stampe del Sassi Bologna, anno 1797. *Modena*, 1841

† Opere edite ed inedite del Prof. Luigi Galvani raccolte e publicate per cura dell' Accad. delle Scienze dell' Istit. di Bologna. (*Edited by Gherardi, who added an Appendix, or 2nd volume.*) 4to. 120 and 505 pp. Portrait and Autographs. *Bologna*, 1841

Aggiunta alla collezione delle opere di Galvani. (*Edited by Gherardi.*) 4to. *Bologna*, 1842

A German translation, with some additional observations, by Voight (of Galvani's works).

† Elogio di Luigi Galvani detto da Mle. Medici nel Teatro anatomico dell' antico Archiginnasio di Bologna. . . 4to. 29 pp. *Bologna*, 1845

Predieri, E. Di alcuni Autografi del Galvani ultimamente rinvenuti. 4to. *Bologna*, 1862

Eloges historiques de, par Alibert, &c. (*Vide Alibert.*) *Paris*

† Portrait Incisione. Marchi fecit.

† **Galvanic Society** (Paris). Communications to, by Winckler, Abrial (a Mem. of Pfingsten), Mojou, Nauche, Gautherot, Izarn, and the Commission of Medical Application (of Galvanism). 8vo. 2 pp. (*Phil. Mag.* xv. 281.) *London*, 1803

† On 28th May made, for the second time, some experiments on a large scale at the Veterinary School of Alfort. (*Phil. Mag.* xvi. 90.) 1803

† Notice of Experiments made by the Galvanic Society of Paris on the discovery announced by M. Pacchiani, of the composition of the Muriatic acid. 8vo. 5 pp. (*Ann. d. Chim.* lvi.; *Phil. Mag.* xxiv. 172.) *London*, 1806

† Account of its Proceedings during the years 1804 and 1805, read at its sitting 6th February, 1806. 5 pp. (*Phil. Mag.* xxiv. 183.) *London*, 1806

† Notices of Experiments made by the Galvanic Society of Paris, drawn up by M. Riffault, one of the members. 8vo. 3 pp. (*Ann. d. Chim.* lvi. 61.) (*Phil. Mag.* xxv. 260.) *London*, 1806

Gamaches, Etienne Simon. *Born about* 1672, *at Meulan; died February* 7, 1756, *at Paris.*

Dissertation sur le Méchanisme de l'Electricité. (*Mém. de Trevoux*, Janv. 1753. vol. ii. art. 9; and in his *Dissertations Littéraires et Philosophiques*, à Paris. 1755. 12mo.) 1755

† **Gamble**, J. Observations on Telegraphic experiments, or the different modes which have been or may be adopted for the purpose of distant communication. 4to. 20 pp. 1 plate. *London, n. d.*

Gandolfi, B. Lettera al Sig. D. Morichini sull' ottima ed economica costruzione delle macchine elettriche. (*Antologia Romana*, 1797.) *Roma* 1797

Gandolfi, B.—*continued.*

Dissertazione sopra le condizioni necessarie perché una macchina elettrica sia capace del massimo effetto. (*Giorn. Lett. di Napoli*, 1802.) *Napoli*, 1802

(*Vide* also Modici and Gandolfi.)

Gann. (*Vide* Mackrell, Gann and Pollock.)

† **Gannett**, C. An account of a curious and singular appearance of the Aurora-borealis on the 27th March, 1781. 4to. 4 pp. (*Mem. Amer. Acad.* Old Series, vol. ii. part i. p. 136.) *Boston*, 1793

† An historical Register of the Aurora-borealis from August 8, 1781, to August 19, 1783. 4to. 7 pp. (*Mem. Amer. Acad.* Old Series, i. part ii. p. 327.) *Boston*, 1785

† **Ganot**, A. Trattato elementare di fisica sperimentale ed applicata, e di meteorologia . . 7a edizione Italiana, sulla 10a edizione originale del 1862, aumentata di 14 nuove figure e dei più recenti studii . . per cura do C. Hajech e. V. Masserotti. 8vo. 944 pp. *Milano*, 1862

Traité élémentaire de Physique expérimentale et appliquée et de Météorologie, suivi d'un recueil nombreux de problèmes. 18mo. 857 pp. *Paris*, 1862

Traité élémentaire de Physique expérimentale et appliquée et de Météorologie. 1864

Physics experimental and applied. Edited by E. Atkinson. For the use of Colleges and Schools.

Garcés de Marsilla, D. A. Manual de telegrafía electrica para uso de empleados en los telégrafos eléctricos militares de Calaluña. 8vo. 40 pp. 1 plate. *Madrid*, 1853

Gardane. Conjectures sur l'Electricité médicale, avec des recherches sur la colique métallique. 12mo. (*From Manduit*, p. 249.) 1768

Conjectures sur l'Electricité médicale, avec des recherches sur la colique métallique. (*From Guitard.*) *Paris*, 1778

(*Note.—Van Troostwyk and Krayenhoff say at* p. 159, 1768, *and at* p. 227, 1778.)

Garde. (*Vide* La Garde, De.)

Gardini, Anton. Beschreibung eines sehr empfindlichen Electrometers. (*Mayer's Samml. Physik. Aufsätze der Gesellsch. Böhmischer. Naturf.*, tom. iii. p. 393.)

Gardini, Giuseppe Francesco. *Born January* 22, 1740, *at Vascagliana, Province of Asti, in Piedmont; died May* 15, 1816, *at Asti.*

† L'applicazione delle nuove scoperte del fluido elettrico agli usi della ragionevole Medicina. . . Gandini. 8vo. 248 pp. *Genova*, 1774

† De effectibus electricitatis in Homine Dissertatio. 8vo. 141 pp. *Genuæ*, 1780

† De influxu electricitatis atmosphericæ in Vegetantia. Dissertatio ab Acad. Lugdunensi præmio donata an. 1782. 8vo. 157 pp. *Augustæ Taurinorum*, 1784

† De electrici ignis natura. Dissertatio. 4to. 236 pp. 1 plate. *Mantuæ*, 1792

† De electrici ignis natura od. et præf. est J. Mayer. 8vo. 197 pp. 1 plate. *Dresden*, 1793

Abh. v. d. Natur. d. elek. Feuers. a.d. Lat. von J. G. Geisler. 8vo. *Dresden*, 1793

Descrizione d'un istrumento proprio per conoscere l'elettricità tanto giornaliera quanto spontanea degli uomini, &c. (*Giorn. scientifico, &c. Torino*, 1789.) *Torino*, 1789

Esperimenti fatti nel mese . . 1789 sopra l'elettricità spontanea degli uomini, &c. (*Giorn. scientifico, &c. Torino*, 1789.) *Torino*, 1789

Sulla differenza dell' azione dell' elettricità della macchina e della pila. 1806

De ratione qua distribuitur ignis electricus in diversorum corporum superficie. *Turin*, 1812

† **Gardini,** Guido. Esercitatione fisica tra li Sig. Studenti . . di Susa sulla elettricità, &c. . . 12mo. 45 pp. *Susa ?* 1798

† **Gardner,** D. Galvanic Experiments, by Mr. D. Gardner, Lecturer on Chemistry at the City Dispensary (to Mr. Tillouh). 8vo. 2 pp. (*Phil. Mag.* xxv. 364.) *London*, 1806

Garipuy. Mémoire sur un coup de Tonnerre arrivé près la ville de Castres. . . Réflexions sur les conducteurs électriques. (Lu 11 Avril, 1782.) 4to. (*Toulouse Acad.* 1re série, tom. ii. p. 188. *Toulouse*, 1784

Garn, J. A. De Torpedine recentiorum genere anguilla. 4to. *Wittеb.* 1778

Garnault. (*Vide* Harris.)

Garnier, P. Modification apportée à l'indicateur dynamomètre de Watt. Nouveau mécanisme pour les communications télégraphiques au moyen de l'électricité. 4to. (*Comptes Rendus*, xxi. 526.) *Paris*, 1845

Note sur un nouveau système d'Horloges électrochrones. 4to. (*Comptes Rendus*, xxv 271, and xxix. 189.) *Paris*, 1847 *and* 1849

Télégraphe à Cadran. (*Table Comptes Rendus*, p. 235.)

† Cylindre automatique pour la composition et la transmission des signaux télégraphiques de Morse. M. P. Garnier contre M. G. Marqfoy, Arrêt de la Cour Impériale de Paris. 8vo. 15 pp. 1 plate. (*Extrait du Journal d'Invention.*) *Paris*, 1858

Garo (Professeur à Turin). Une lettre . . électricité. (*From Nollet.*) *Turin*, 1753

Garrat, A. C. Electro-physiology and Electro-therapeutics. 8vo. *Boston, U.S.*, 1860

† Medical Electricity, embracing Electro-physiology and Electricity as a Therapeutic, &c. . . 3rd edition, revised, &c. 8vo. 1103 pp. *Philadelphia*, 1866

Garzoni, Leond. Veneziano. A work (much praised) on the Nature of Magnetism. Before that of Gilbert

(*Note.—Faure says* (*in reference to electrical matter, or having relation thereto*): "*Il Trattato del P. Leonardo Garzoni lodato dal Cabeo girò solo per le mani dei dotti inedito e non compinto.*" "*Morte interveniente,*" *says Cabeus.*)

† **Gasc,** J. P. Mémoire sur l'influence de l'Electricité dans la fécondation des plantes et des animaux, &c. . . 4to. 63 pp. *Paris*, 1823

Gasserus. (*Vide* Peregrinus, Peter.)

Gassendi, Pierre. *Born January* 22, 1592, *at Champtercier, near Digne; died Oct.* 24, 1655, *at Paris.*

Opera omnia ed. hab. Lugduni Bat. Folio. *Lugduni*, 1658

Gassicourt. (*Vide* Cadet de Gassicourt.)

† **Gassiot,** J. P. An account of Experiments made with the view of ascertaining the possibility of obtaining a Spark before the circuit of the Voltaic battery is completed. (Read December 19, 1839.) 4to. 10 pp. (*Phil. Trans. for* 1840, part i. p. 183.) (*Faraday's copy.*) *London*, 1840

† On certain phenomena connected with the Spark from a secondary coil. 8vo. 2 pp. 1 plate. (*Proc. London Elec. Soc.*) *London*, 1841

On the Polarity of the Voltaic battery. (Read November 15, 1842.) 8vo. 7 pp. (*Proc. London Elec. Soc.*) *London*, 1842 ?

† A description of an extensive series of the Water battery, with an account of some experiments made in order to test the relation of the electrical and chemical actions which take place before and after completion of the Voltaic circuit. 4to. 14 pp. 1 plate. (*Phil. Trans. for* 1844, part i. p. 39.) (*Faraday's copy.*) *London*, 1846

On the decomposition of Water under pressure by the Galvanic battery. 8vo. 2 pp. (*Report of the British Association for* 1853.) *London*, 1854

Gassiot, J. P.—*continued.*

† The Bakerian Lecture. On the Stratifications and dark Band in electrical discharges as observed in the Torricellian vacua. 4to. 16 pp. 1 plate. (*Phil. Trans.* 1858.) *London*, 1858

† Stratified discharges in Vacuum tubes. 8vo. 4 pp. 1 plate coloured. (*Intellectual Observer, March* 1866, p. 81.) *London*, 1866

Gastaldi, L. Saggio di tolografia mobile a bandiere atta a far servizio si in terra che in mare non men di giorno che di notte. 8vo. *Torino*, 1855

† **Gastrell and Blanford.** Report of the Calcutta Cyclone of the 5th October, 1864. 8vo. 150 pp. 8 plates and charts. *Calcutta*, 1866

† **Gatteschi, G.** Saggio sul magnetismo esposto nelle sue lezioni. 8vo. 112 pp. (*Volta's copy.*) *Pisa*, 1818

Gattoni, Giulio Cesare. *Born . . . ; died*, 1809.

† Lettera all' editore sui Fulmini di Ritorno. (Data Como, 15 Luglio, 1808.) 4to 14 pp. 1 plate (lith). (*Nuova Scelt. d' Opusc.* ii. 289 & 310.) *Milano*, 1807

Gattoni, G. S. Studies on Electricity, &c. (*From Lombardi*, vol. ii. p. 74.) 1768

Gaubil, Ant. Observations mathématiques, astronomiques, géographiques, chronologiques, et physiques, tirées des anciens livres, ou faites nouvellement aux Indes et à la Chine par les Pères de la Comp. de Jésus. Vol. ii. *Paris*, 1829

Gaubius, J. D. (*Vide* Allamand.)

† **Gaugain, J. M.** Mémoire sur une nouvelle boussole des tangentes. (Présenté à l'Académie des Sciences, 24 Janvier, 1853.) 8vo. 6 pp. (*Ann. de Chim.* 3me série, xli. 66.) *Paris*, 1854

† Traduction, Préface, et Notes. 8vo. (*Vide Ohm, Théorie des Courants.*) *Paris*, 1860

Gauguier. (*Vide* Gonon and Gauguier.)

Gauss, Karl Friedrich. *Born April* 30, 1777, *at Brunswick; died February* 23, 1855, *at Göttingen.*

† Intensitas vis magneticæ terrestris ad mensuram absolutam revocata. 4to. 44 pp. *Göttingen*, 1833

Nachrichten über d. magnet. Observatorium in Göttingen. (*Götting. gelehrt. Anzeig.* 1834.) *Göttingen*, 1834

Note.—Gauss and Weber (*printed* 1838), p. 15, *say*: "*Die erste offentliche Erwähnung dieser Versuche* (*i.e. application of their single connexion, &c. to telegraphic purposes*) *findet man in den Gött. gel. Anz.* 1834. *S.* 1273, *and Vergl. Schumacher's Jahrbuch fur* 1836."

Intensitas vis magneticæ terrestris ad mensuram absolutam revocata. 4to. 44 pp. *Gottingen*, 1834

Note.—Poggendorff, i. 854, *says, In Comment. recent. Soc. Gott.* viii. 1832-37, (*and*) *deutsch in Poggend. Ann.* xxviii.

Erdmagnetismus und Erdmagnetometer. (*In Schumacher's Jahrbuch*, 1836.) 1836

"Manche Ergänzungungen zu dem bereits beschriebenen Systeme (Telegraphie)." (*Sitzung d. Gesellschaft d. Wissen.* 19 *September* 1837.) *Göttingen*, 1837

Vide also Gauss and Weber, Resultate for 1837, p. 15, &c. for an "Aufsatz" containing the principal contents of the "öffentlicher Vorlesungen" in the Sitzung, September 19, 1837.

† Misura assoluta dell' intensità della forza magnetica terrestre, Memoria tradotta e commentata da Paolo Frisiani. 4to. 197 pp. 1 plate. (*Forms the Primo Supplemento alle Effemeridi astronomiche di Milano.*) *Milano*, 1838

Ein neues Hülfsmittel für die magnetischen Beobachtungen. 4to. *Göttingen*, 1838

Gauss, Karl Friedrich.—*continued.*

Theorie d. Erdmagnetismus verglichen mit A. Erman's Beobachtungen. (*Astr. Nachr.* xix. 1842.) 1842

† Zum Gedächtniss. Von W. S. v. Waltershausen. 4to. 108 pp. *Leipzig*, 1856

Seine sämmtl. Werke, her ausgegeben von d. Königl. Gesellsch. d. Wiss. in Göttingen werden. 7 Bde. 4to. um assen Erschienen. Bd. v. Mathemat. Physik. . . . 4to. 1863

(*Vide* also Fusinieri.)

† Gauss und Weber. Resultate aus den Beobachtungen des Magnetischen Vereins im Jahre, 1836. Idem im Jahre, 1837. Idem im Jahre, 1838. *Leipzig*, 1837-8-9

† Resultate aus den Beobachtungen des magnetischen Vereins in den Jahren, 1836-7-8-9-40-41 Jährlich. 6 vols. 8vo. and 3 vols. Atls. in 4to. *Leipzig*, 1837-43

† "Nach den Elementen der Theorie entworfen. Supplement zu den Resultaten aus den Beobachtungen des magnetischen Vereins unter Mitwerkung von C. W. B. Goldschmidt. 36 pp. 18 maps and 4 tables. *Leipzig*, 1840

(*Vide* also Abria.)

Gauteron. Ou Tourbillon. 4to. (*Montpellier Acad.*) *Montpellier*, 1778

Gautherot, N. Recherches sur le Galvanisme. (*Mém. des Soc. Savantes et Littér.* i. p. 471.) 1802 (?)

"Rapport fait à l'Institut, le 21 fructidor d. 1802 par Fourcroy et Vanquelin." (*On 5 Mem. of Gautherot.*) *Pau*, 1802

Mémoire sur le fluide galvanique. (*Mém. des Soc. Savantes et Littér.* i. pp. 164 and 168.)

† Adhesion of the ends of two wires in contact with the upper and lower ends of the Pile in 1801. Notice translated from the Ann. de Chim. xxxix. 209. 8vo. 1 p. (*Phil. Mag. or Annals*, iv. 458.) *London*, 1828

† Gautherot and Nauche. Two Experiments in Galvanism (by Gautherot). Facts in regard to the application of Galvanism in cases of Hemiplegia (by Nauche). 8vo. 3 pp. (*Phil. Mag.* xv. 368.) *London*, 1803

Gauthier (or Gautier), J. L. Dissertatio inauguralis de irritabilitatis notione, naturâ, et morbis. 8vo. 190 pp. *Halæ*, 1793

Gautier, J. Mémoire sur l'aimant. 8vo. (*Poggend.* i. 958, *says in Mém. Soc. Nancy*, ii.) *Nancy.*

Gavard, Capt. Notice sur le Diagraphe. 8vo. 4 folding plates. *Paris*, 1839

† Gavarret, T. Lois générales de l'électricité dynamique. 4to. 151 pp. *Paris*, 1843

† Traité de l'électricité. Tom. i. 12mo. 595 pp. *Paris*, 1857

† Traité de l'électricité. Tom. ii. 12mo. 604 pp. *Paris*, 1858

† Lehrbuch der Elektricität. Deutsch bearbeitet von Dr. R. Arendt, Erster Th. 8vo. 463 pp. *Leipzig*, 1859

† Lehrbuch der Elektricität. Deutsch bearbeitet von Dr. R. Arendt. Zweiter Th. 8vo. 524 pp. *Leipzig*, 1860

† Télégraphie électrique. 12mo. 428 pp. *Paris*, 1861

† Telegrafia elettrica di J. Gavarret con aggiunte tratte da E. E. Blavier, traduzione Italiana sull' originale Francese del 1861 con preliminari e note di Alcs. Magrini. 8vo. 395 pp. *Milano*, 1862

(*Vide* also Abria.)

Gay. System of relation (electric) between Stations and Trains in motion, &c. (*From Du Moncel, Exposé*, p. 175.)

Gay-Lussac, Louis Joseph. *Born December 6, 1778, at St. Léonard, Limousin; died May 9, 1850, at Paris.*

† Account of his last aerostatic ascent, given to the . . National Institute. 8vo. 3 pp. (*Phil. Mag.* xx. 83.) *London*, 1804

† Account of an Aerostatic Voyage performed by M. Gay-Lussac, on the 29th of Fructidor, year 12, and read in the National Institute, Vendémiaire 9th, year 13. 8vo. 8 pp. (*Phil. Mag.* xxi. 220.) *London*, 1805

† Instructions sur les Paratonnerres . . . suivies des Rapports . . . à l'Institut . . et à l'Acad. des Sciences. Fol. 39 pp. 1 plate. (*Vide full account of this work at Comité des Fortifications.*) *Paris*, 1808

† Instructions sur les Paratonnerres. (Signé) Poisson, Lefevre, Gineau, Dulong, Fresnel, et Gay-Lussac rapporteur. 4to. 31 pp. 2 plates. *Paris*, 1824

† Instruction sur les paratonnerres. 8vo. 51 pp. 2 plates. *Paris*, 1824

† Discours de M. Becquerel (sur) lui . . . 4to. 5 pp. (*Institut. National Acad. des Sciences.*) *Paris*

† **Gay-Lussac and Biot.** Account of an Aerostatic Voyage performed by Messrs. Gay-Lussac and Biot. Read in the French National Institute, August 27, 1804. 8vo. 9 pp. (*Phil. Mag.* xix. 371.) *London*, 1804

† **Gay-Lussac et Humboldt.** Mémoire sur la Torpille. 8vo. *Paris*

Observations sur l'intensité et l'inclinaison des forces magnétiques, faites en France, Suisse, Italie et Allemagne. (*Mém. d'Arcueil*, vol. i. 1807. *Paris*, 1807

† **Gay-Lussac et Pouillet.** Instruction sur la Paratonnerres adoptée par l'Acad. des Sciences. 12mo. 130 pp. Cuts. *Paris*, 1855

† **Gay-Lussac et Thenard.** Decomposition of the Alkalies. Repetition of Davy's experiments, &c. 8vo. 2 pp. (*Phil. Mag.* xxxii. 88.) *London*, 1809

† Recherches physico-chymiques faites sur la Pile. 2 vols. 8vo. *Paris*, 1811

† Recherches physico-chimiques. *Paris*, 1811

† **Gay-Lussac, &c.** Anleitung zur verfertigung und Benutzung der Blitzableiter . . . aus dem Französischen übersetz. 43 pp. 2 plates. *Strasburg*, 1824

(*Vide* also Poisson and others.)

Gazette Salutaire. Contains many writings on Medical Electricity, from 1776 to 1782, and perhaps more.

† **Gazzaniga,** C. L. Di un miglioramento da farsi alle macchine elettriche. . . . Lettera al Direttore. (*Con Nota del Fusinieri.*) 4to. 4 pp. (*Ann. del. Reg. Lomb.-Veneto*, ii. 359.) *Padova*, 1832

† Saggio di esperienze elettriche fatte coll'uso della macchina elettrica a collettori conjugati. 4to. 36 pp. 1 plate. (*Ann. del. Reg. Lomb.-Veneto*, iii. p. 311.) *Padova*, 1833

† Sunto di esperienze . . . elettriche magnetiche. 8vo. 5 pp. (*Bibl. Ital.* lxxvi. 159. *This forms part of an article at p.* 156, *headed* "*Fata-morgana . . . Sunto di esperienze ottiche, elettriche magnetiche.*") *Milan*, 1834

† Appendice al Saggio di esperienze elettriche fatte coll'uso della macchina elettrica a collettori conjugati, inserito nel bimestre v. e vi. 1833, degli Annali delle Scienze del Regno Lombardo-Veneto. 4to. 14 pp. 1 plate. (*Ann. . . del. Reg. Lomb.-Veneto*, vi. 79.) *Padova*, 1836

† Sul magnetismo temporario, esperimenti del . . Cesare Gazzaniga. 4to. 7 pp. 1 plate. (*Ann. del Reg. Lomb.-Veneto*, vi. 287.) *Padova*, 1836

† Nuove esperienze elettriche. 4to. 25 pp. (*Ann. del Reg. Lomb.-Veneto*, vii. 215.) *Padova*, 1837

† Delle magneti penetrative permanenti. (*To be continued.*) 4to. 22 pp. 1 plate. (*Ann. del Reg. Lomb.-Veneto*, viii. 263.) *Padova*, 1838

Gazzaniga, C. L.—*continued.*

Delle magneti penetrative permanenti. Della misura della forza della magnete dedotta dai movimenti di translazione. Continuazione. Vedi la prima parte, p. 263, vol. viii. Annali. 4to. 12 pp. (*Fusinieri's Annali*, ix. 26.) *Venezia*, 1839

Continuazione della Memoria sulle Magneti penetrative permanenti. 4to. 10 pp. 1 plate. (*Fusinieri's Annali*, ix. 66.) *Venezia*, 1839

† Sopra il magnetismo terrestre. Nota. Continuazione e fine alla Nota. 4to. 21 pp. 3 tables. *Ann. del Reg. Lomb.-Veneto*, xii.207 and 245.) *Vienna*, 1842

† Elettro-statica. 4to. 15 pp. 1 plate. (*Article of the Encyclopedia Italiana, Fascicolo* xxvi.)

† Della Corrente. 4to. 20 pp. 2 plates. (*Articolo estratto dall' Enciclopedia Italiana, Fascicolo* xviii. et xx.)

Gazzeri, G. Aggiunto ai Saggi di naturali Esperienze fatto nell' Accad. del Cimento, p. 4. *Firenze*, 1841

Gazzoni, L. *Died Venice*, 1592. Poggendorff, i. 864, says: "Aus einer unedirten Schrift desselben, soll nach Cabeo's Angabe, G. B. Porta seine Kentnisse vom Magnet entnommen haben."

Cabeus in his Philosophia Magnetica (fol. 1629), *Preface, calls him Garzonius, and mentions Porta in the manner indicated, and others also.*

Gehlen. A. F. Neues allgem. Journ. d. Chemie. 8vo. 9 vols. (*Journ. für Chemie Physik u. Mineralogie.*) *Berlin*, 1803-6

Über d. Misch d. Meteorsteine. 8vo. (*Schweigger's Journ.* vi. 1812.) 1812

Über d. Elektrochem. System u. s. w. 8vo. (*Schweigger's Journ.* xii. 1814.) *Nürnberg*, 1814

Über d. Reduct. d. Metalle durch einander u. die Lichterscheinungen dabei. 8vo. (*Schweigg. Journ.* xx. 1817.) *Nürnberg*, 1817

Gehler, Johann Samuel Traugott. *Born Nov.* 1, 1751, *at Gorlitz; died Oct.* 16, 1795, *at Leipzig.*

Phys. Wörterbuch . . 6 vols. 8vo. *Leipzig*, 1787-95

Phys. Wörterbuch od Vers. e. Erklär. des Vornehmst. a. d. Naturl. 6 vols. 8vo. *Leipzig*, 1799-1801

Physikal. Wörterbuch. neu bearb. v. Brandes, Gmelin, Horner, Littrow, Muncke, Pfaff. 11 vols. 8vo. *Leipzig*, 1825-45

Vol. i.	1825	From Heinsius, vii. 267.
Vol. ii.	1826	
Vol. iii.	1827	
Vol. iv. Part 1	1827	From Schultz, i. 262.
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Vol. v. Part 1	1829	
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Vol. vi. Part 1	1831	
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Vol. vii. Part 1	1833	
" " 2	1834	
Vol. viii.	1836, 1837	
Vol. ix. Part 1	1838	From Schultz, ii. 304.
" " 2	1839	
" " 3	1840	
Vol. x. Part 1	1841	
" " 2	1842	
" " 3	1844	From Schultz, iii. 278.
Vol. xi.	1845	

Gazzaniga, C. L.—*continued.*

Delle magneti penetrative permanenti. Della misura della forza della magnete dedotta dai movimenti di translazione. Continuazione. Vedi la prima parte, p. 263, vol. viii. Annali. 4to. 12 pp. (*Fusinieri's Annali*, ix. 26.) *Venezia*, 1839

Continuazione della Memoria sulle Magneti penetrative permanenti. 4to. 10 pp. 1 plate. (*Fusinieri's Annali*, ix. 66.) *Venezia*, 1839

† Sopra il magnetismo terrestre. Nota. Continuazione e fine alla Nota. 4to. 21 pp. 3 tables. *Ann. del Reg. Lomb.-Veneto*, xii. 207 and 245.) *Vicenza*, 1842

† Elettro-statica. 4to. 15 pp. 1 plate. (*Article of the Encyclopedia Italiana, Fascicolo* xxvi.)

† Della Corrente. 4to. 20 pp. 2 plates. (*Articolo estratto dall' Enciclopedia Italiana, Fascicolo* xviii. et xx.)

Gazzeri, G. Aggiunto ai Saggi di naturali Esperienze fatto nell' Accad. del Cimento, p. 4. *Firenze*, 1841

Gazzoni, L. *Died Venice*, 1592. Poggendorff, i. 864, says: "Aus einer unedirten Schrift desselben, soll nach Cabeo's Angabe, G. B. Porta seine Kentnisse vom Magnet entnommen haben."

Cabeus in his Philosophia Magnetica (fol. 1629), *Preface, calls him Garzonius, and mentions Porta in the manner indicated, and others also.*

Gehlen, A. F. Neues allgem. Journ. d. Chemie. 8vo. 9 vols. (*Journ. für Chemie Physik u. Mineralogie.*) *Berlin*, 1803-6

Uber d. Misch d. Meteorsteine. 8vo. (*Schweigger's Journ.* vi. 1812.) 1812

Über d. Elektrochem. System u. s. w. 8vo. (*Schweigger's Journ.* xii. 1814.) *Nürnberg*, 1814

Über d. Roduct. d. Metalle durch einander u. die Lichterscheinungen dabei. 8vo. (*Schweigg. Journ.* xx. 1817.) *Nürnberg*, 1817

Gehler, Johann Samuel Traugott. *Born Nov.* 1, 1751, *at Gorlitz; died Oct.* 16, 1795, *at Leipzig.*

Phys. Wörterbuch . . 6 vols. 8vo. *Leipzig*, 1787-95

Phys. Wörterbuch od Vers. e. Erklär. der Vornehmst. a. d. Naturl. 6 vols. 8vo. *Leipzig*, 1799-1801

Physikal. Wörterbuch. neu bearb. v. Brandes, Gmelin, Horner, Littrow, Muncke, Pfaff. 11 vols. 8vo. *Leipzig*, 1825-45

Vol. i.	1825	From Heinsius, vii. 267.
Vol. ii.	1826	
Vol. iii.	1827	
Vol. iv. Part 1	1827	From Schultz, i. 262.
" " 2	1828	
Vol. v. Part 1	1829	
" " 2	1830	
Vol. vi. Part 1	1831	
" " 2		
Vol. vii. Part 1	1833	
" " 2	1834	
Vol. viii.	1836, 1837	
Vol. ix. Part 1	1838	From Schultz, ii. 304.
" " 2	1839	
" " 3	1840	
Vol. x. Part 1	1841	
" " 2	1842	
" " 3	1844	From Schultz, iii. 278.
Vol. xi.	1845	

Gehler, Johann Samuel Traugott—*continued*.

Dass xi. Bd. Sach u. Namen-register, mit ergänzten Zusätzen v. Muncke, &c. (*From Poggendorff*, ii. 238.)

Neues Wörterbuch.

Geiger, C. F. Abhandlung über den Galvanismus und dessen Anwendung. 8vo. *Leipzig*, 1803

Geiger, Philipp Lorenz. *Born Aug.* 30, 1785, *at Freinsheim; died Jan.* 19, 1836, *at Heidelberg*.

Dissertation sur le Galvanisme et son application à la Médecine. 8vo. 32 pp. 1802 *or* 1803

Geisler, J. G. (*Vide* Gardini, 1793.)

Geissler of Bonn. Tubes for Luminous effects of Ruhmkorf. (*From Carl.*)

Gellert, C. E. De densitate mixtorum ex met llis et semi-metallis factorum. 4to. *Petropol*, 1751

(*From Van Swinden*, "*Analogia*," p. 26, vol. i., *who refers to* tom. xiii. p. 382 *of the Commentar. Acad. Petrop. for Gellert's Experiments*, 15 *and* 16. *Reuss says*, p. 392, "*Gellert, Experiments on the action of a small Magnet being greater than that of a larger on a mixture of Iron and other metals: and property of Antimony in weakening the attraction when mixed with Iron.*)

† **Gellibrand**, H. A Discourse mathematical on the Variation of the Magnetic Needle, together with the admirable Diminution lately discovered. Sm. 4to. 22 pp. *London*, 1635

(*Discovery of secular variation of declination.*) (*Very scarce.*)

Gemignani, L. Della vitale elettromozione. 8vo. *Lucca*

† **Gemminger**, M. Electrisches Organ von Mormyrus und Schwanzskolot. von Eryx. (*Dissertatio Inauguralis.*) 1 plate, 15 pp. 8vo. *München*, 1847

Geneva Archives des Sciences physiques et naturelles. Nouvelle Période. 9 vols. 8vo. *Geneva*, 1858-60

† Archives de l'Electricité. Supplément à la Bibliothèque Universelle de Genève. 5 vols. 8vo. *Geneve*, 1841-45

Archives des Sciences physiques. 33 vols. 8vo. *Geneve*, 1846-56

Geneva Bibliotheque. Bibliothèque Britannique en 2 séries (*i.e.* divisions) intitulées (1) Littérature, (2) Sciences et Arts. 1e Série. 144 vols. 8vo. 60 vols. de Littérature, 60 de Sciences et Arts, 20 d'Agriculture, 4 de Tables = 144. *Geneva*, 1796-1815

Bibliothèque Universelle des Sciences, Belles-Lettres, et Arts faisant suite à la Bibliothèque Britannique redigée à Genève par les auteurs de ce dernier recueil. 2de Série. 136 vols. 8vo. 60 vols. de Litt., 60 de Sciences et Arts, 14 d'Agriculture, 2 de Tables = 136. (*From Cat. des Livres de la Société de Lecture de Genève* p. 530.) *Geneve*, 1816-35

Bibliothèque Universelle de Genève. Nouvelle Série. Third series. 39 vols. 8vo. *Geneva*, 1836-45

Bibliothèque Universelle. Littérature et Sciences. Quatrième Série. Fourth series. 33 vols. 8vo. (*continued after* 1856). *Geneve*, 1846-56

Catalogue de la Bibliothèque Publique de Genève rédigée par Louis Vaucher. 8vo. 948 pp. In two parts. *Geneve*, 1834

MSS. Catalogue de la Bibliothèque Publique de Genève. Fol. *Geneva*.

Geneva Institution. Bulletin de l'Institut National Genévois. 8vo. *Geneva*, 1853

Mémoires de l'Institut National Genévois. 4to. (*From Cat. des Livres de la Société de Lecture de Geneve. Mémoires continued after* 1853) *Geneve*, 1853

Geneva Société de Lecture. Catalogue des livres de la Société de Lecture de Genève. (Première partie) with Supplement. 8vo. 560 pp. and 90 pp. Tables. *Geneve*, 1839

Catalogue des livres de la Société de Lecture de Genève. Seconde partie. 8vo. 432 pp. and 55 pp. Tables. *Geneve*, 1857

Geneva Société de la Physique. Mémoires de la Société de la Physique et d'Histoire naturelle de Genève. 4to. Plates. (*The thirteenth vol. printed in* 1854.) *Geneve*, 1821

† **Genevois, J. P.** Théorie de la Grêle et moyens de la prévenir. 4to. 1 plate. 92 pp. et Table. *Turin*, 1838

Teoria della Grandine e mezzi sperimentali dei prevenirla. 8vo. 108 pp. *Torino*, 1840

Genhart, R. Ætiologia do Magnetismo naturali, &c. 4to. 1 plate. 30 pp. *Turici*, 1803

Genoa Acad. Memorie dell' Accad. delle Scienze e Belle Arte. 4to. *Genova*, 1809

Gentil. Voyage dans les Mers de l'Inde, &c. (Tom. ii. p. 659, *Ascending Lightning. Vide* Bertholon, p. 160.)

Experiments, &c. in Vienna in 1853 on Contrary Currents in the same wire, exhibited to the Vienna Academy. Application to the line from Vienna to Linz whilst the question was under discussion in Paris in 1853-4, at French Institute. He was Director of the Austrian Telegraphs. (*From Magrini's Notizie Istoriche, &c.*)

Gentleman's Magazine. *London.*

Geoffroy Saint-Hilaire, E. Sur l'Anatomie comparée des organes électriques de la raie torpille, du gymnote étourdissant, et du silure trembleur. (*Annal. du Muséum*, vol. i. An. xi.) *Paris*, 1803 (?)

† Memoir on the comparative anatomy of the Electric Organs of the Torpedo, the Gymnotus electricus, and the Silurus electricus. (*Translation from Annals du Muséum National*, No. 5.) 8vo. 11 pp. 1 plate. (*Phil. Mag.* xv. 126.) *London*, 1803

† **Georg, F.** Den Elektromagnetiske Telegraph Popular fremstilling med. saerligt Hensyn til Damer. 24 pp. 8vo. *Kjöbenhavn*, 1857

Geographical Society of London. (*Vide* Royal Geographical Society.)

Gerard, F. Méthode de déterminer la différente capacité des métaux d'accumuler le fluide électrique. 8vo. (*Journal du Chim. de Van Mons*, No. 4, p. 30.) *Bruxelles*

Gerbi, R. Corso di Fisica. 5 vols. 8vo. 1,800 pp. 18 plates. *Pisa*, 1823-25

† **Gerboin, A. C.** Recherches expérimentales sur un nouveau mode de l'Action élect. 8vo. 1 plate. 358 pp. *Strasbourg*, 1808

Quelques expériences galvaniques. (*Mém. des Soc. Savantes et Littér.* ii. 199.) *Paris*

Gerdes, F. Beskrifning på et skydrag, observeradt uti Mälaren och Mariæbergs sundet den Aug. 10, 1790. (*Vetensk Acad. Nya Handl.* A. 1790, S. 208) *Stockholm*, 1790

Beschreibung eines Wolken-Zuges, der in Mäler und Mariabergs, Sunde ist beobbachtet worden den 10 Aug. 1790. (*In Neue Schwedische Akad. Abhandl.* J. 1790, S. 196.) *Stockholm*, 1790

Gerhard, C. A. De l'action de l'électricité sur le corps humain et de son usage dans les paralysies. 4to. (*Mém. de Berlin*, 1772, p. 141.) *Berlin*, 1772

Sur les principes de la Tourmaline. 4to. (*Mém. de Berlin*, 1777.) *Berlin*, 1777

Observations sur la physique. (*From Van Troostwyk and Krayenhoff.*) 1779

(*Note.—Poggendorff*, i. 881, *has* "*Triga dissertationum physico-medicarum.* 8vo. *Berol*, 1763.")

Gerke, Francis Clemens. Pract. Telegraphist od. d. electro-magnet. Telegraph nach d. Morsiche Systeme. 8vo. 144 pp. *Hamburg*, 1851

Der Electro-Magnetismus als Maschinen-Triebkraft. Versuch einer Lösung des Problems. 8vo. 16 pp. 1 plate. *Hamburg*, 1857

† **Gerling**, Becker, und **Andera** (?) Graphische Darstellung der magnetischen Declination zu Marburg auf u. Jahre 1843. Fol. 7 plates. *Marburg*

Gerling, C. L. Beschreibung eines neuen Hütchens zur Aufhängung der Magnetnadel in Compässen. (*From Lamont, Handbook*, p. 433, *in Schr. d. Gesellsch. zu Beförderung d. gesammt. Naturwiss. in Marburg*, vol. i.) *Marburg*, 1823

† Corresponding changes of the diurnal magnetic declination observed at Marburg (zu Hesse.) Latitude 50° 48′ 47″ N.; Longitude 8° 46′ 25″ E. 4to. 28 pp. *Washington*, 1854

Gersdorff, A. T. Von. Ueber einige elektrische Versuche. 8vo. (*Neue Schr. der Gesellsch. Naturf. Freunde zu Berlin*, ii. 247.) *Berlin*, 1799

† Über meine Beobachtungen der atmosphärischen Elektricität zu Messersdorf in der Oberlausitz; nebst einigen daraus gezogenen Resultaten. 4to. 108 pp. 15 plates. *Görlitz*, 1802

Gersdorf und Knebel. Anzeiger d. nothwendigsten Verhaltungs regeln bey nahen Gewittern, &c. . . 1st edition. 8vo. *Görlitz*, 1798

Anzeige d. nothwendigsten Verhaltungs regeln bey nahen Gewittern, &c. . . 2nd edition. 8vo. 1800

† **Gerspach**, E. Histoire administrative de la Télégraphie aérienne en France. 8vo. 116 pp. (*Extrait des Anns. Télégraphiques.*") *Paris*, 1861

Gesellschaft Deutscher Naturforcher und Aerzte. Amtliche Berichte über d. Versammlungen de Gesellschaft. . . 4to.

Gesellschaft Naturforschender Freunde. (*Vide* Berlin Society.)

Gesellschaft Med. in Mainz. Galvanische u. elektrische Versuche au Menschen u. Thier Körpern, &c. 4to. *Frankfort-on-Maine*, 1804

(*The society was Kircher, Molitor, Ruf, Skack, jun., Wenzel and Wittmann.*)

Gesner, Conrad. De raris et admirandis herbis, quæ sive quod noctu lucent, sive alias ob causas Lunariæ nominantur, Commentariolus. Et obiter de aliis etiam rebus quæ in tenebris lucent. 4to. *Tiguri* (*Zurich*), 1555

De lunariis herbis et rebus noctu lucentibus. 8vo. 1669

Gessner, J. Mathias. De electro veterum. (*Comment. Soc. Götting.* iii. 67, 1753.) *Göttingen*, 1753

† **Gete**, C. J. Anmerkungen von einem seltsamen Verhalten des Seecompasses an einer Stelle in den nylandischen scheeren. 8vo. 5 pp. 1 map. (*K. Schwed. Akad.* Abh. xii. 298.) *Hamb. u. Leipzig*, 1751

† **Gentebruck**, J. G. Erörterungen und Wünche in Hinsicht auf Blitzableiter. Zwei Vorlesungen in der Naturforschenden Gesellschaft der Osterlands. 8vo. 48 pp. 1 plate. *Leipzig*, 1828

Gherardi, G. Ragionamento accademico sopra varie questioni fisico-elettriche. 4to. 24 pp. *Montalboddo*, 1810

† **Gherardi**, S. Tradne. di Demonferand, Manuel, con note ed *aggiunte* del traduttore. 8vo. (*Much additional matter.*) *Bologna*, 1824

Alcune esperienze sopra le nuove correnti e le scintille magneto-elettriche. Lettera al Nobili. 8vo. 17 pp. *Firenze*, 1832

Dissertatio de aliquot experimentis recens physicum inventum Faradayi spectantibus, ac de præcipuis nonnullis voltianorum profluviorum (*i.e.* delle correnti del Volta) proprietatibus. 2 parts. 4to. 38 pp. and 1 errata. (*Ext. Nov. Act. Acad. Inst. Bonon.* Tom. ii.) *Bonon.* 1840

(*In a foot-note at* p. 1 *is said* "*Priorem hanc Dissertationis partem Academiæ lecti jam inde ab ejus conventu diei 5 Aprilis* 1832.)

Gherardi, S.—*continued.*

Commentarium de novo quoddam apparatu magneto-electrico. Lect. 17 Jan. 1833. 4to. 26 pp. 1 plate. (*Ext. Nov. Act. Acad. Inst. Bonon.* tom. ii.) 1840?

Disquisitio de magnete electrico recentiori ad usus chimicos et de profluviis magnetico-electricis ad hoc aptioribus. 4to. 26 pp. 1 plate. (*Ext. Act. Acad. Inst. Bonon.* tom. iii.) 1840?

De quadam appendice ad galvanometrum multiplicans, et de ejus usu in profluviis variis, ac præcipue Faradyeis expendendis: habita . . 5 Mart. 1835. 4to. 42 pp. (*Ext. Act. Acad. Inst. Bon.* tom. iii.) 1840?

Rapporto sui manoscritti del . . Galvani, legati all' Accad. . . di Bologna . . per Aldini . . con Appendice. . . su di alcuni passi risguardanti l'elett. animale. . . Dalla Collezione dell' opere del. . Galvani pubb. dall' Accad. . . dell' Ist. di Bologna. 4to. 106 pp. *Bologna*, 1840

Osservazioni sopra alcune esperienze elettro-magnetiche di Nobili.

De electricitate et magnetismo animadversiones variæ. (*From Lamont.*) *Bononiæ*, 1841

Ghirlanda. Intorno agli effetti del galvanismo nell' emiplegia con perdita di memoria. (Read) 7 Maggio 1835. (*Treviso Athenæum*, vol. v. p. v. *in Elenco delle letture. . . fatte rol. .* 1833-34, *e tutto* 1843-44.)

† **Ghisi, L. A.** Telegrafia elettrica, ossia Descrizione dei Telegrafi elettro-magnetici loro modo di agire, &c. . . Seconda Edn. ampliata e corretta. 4to. 76 pp. 1 plate (lith.) *Milano*, 1850

† Descrizione di due nuovi telegrafi elettrici, aggiunti nella seconda ediz. alla edizione prima della lezione sulla telegrafia elettrica. 8vo. 16 pp. 1 plate. *Milano*, 1850

† Nuove teorie sulla formazione della Grandine, sull' origine dell' elettricità nella pila, esposte in due lezioni. 8vo. 31 pp. 1 plate. *Lodi*, 1869

Giessman, Fr. Über d. Steinregen. (*From Ersch* 1828, p. 260.) *Wien*, 1803

Giquet. Sur l'electrum d'Homère. (*Revue archéol. 15 Juillet* 1859, 16*e année*, p. 235-41.) *Paris*, 1859

† **Gilbert, Davies.** On the luminous Belt of September the 29th. 8vo. 2 pp. (*Phil. Mag. or Annals*, iv. 453.) *London*, 1828

† **Gilberti, Guil.** De magnete magneticisque corporibus, et de magno magnete tellure; Physiologia nova, plurimis et argumentis et experimentis demonstrata. Ed. prima. Folio (sm.) 254 pp. *Londini*, 1600

(*Kuhn*, p. 7, *refers to an edition printed at Amsterdam*, fol. 1600.)

† Tractatus; sive Physiologia nova de Magnete. . . Omnia nunc . . recognita . . opera et studio Wolfgangi Lochmans. 2nd edition. 4to. 232 pp. 12 plates. *Sedini*, 1628

† Tractatus; sive Physiologia nova, de Magnete . . opera et studio D. Wolfgangi Lochmani. 3rd edition. 4to. 232 pp. 12 plates. *Sedini*, 1633

(*This seems to be a mere reprint of the edition of* 1628.)

De mundo nostro sub lunario Philosophia nova. Opus posthumum, ab auctoris fratre collectum. . . 4to. 316 pp. 1 plate. (*The 3rd and 4th books are on Meteorology, on Magnetism in reference to the Motion of the Moon, &c.*) *Amsterdam*, 1651

† **Gilbert, Isaiah.** A method of affording relief to persons injured by Lightning. In a letter from Mr. Isaiah Gilbert to the Rev. Mr. Steele. 8vo. 2 pp. (*Phil. Mag.* xvii. 306.) *London*, 1803

Gilbert, L. W. Annalen der Physik. 30 vols. 8vo. *Leipzig*, 1797-1808

tel als Neue Folge. 76 vols. and 1 vol. Register. 1809-24

(*Fortgesetzt in Poggendorf's Annalen der Phys. und Chemie. Herausgegeben zu Berlin.*)

Gilbert, L. W.—*continued*.

† Neue Versuche mit trockner elekt. Säule (enthaltend): (1) Zamboni. Brief an Prof. Pictet (p. 182). (2) Jager Säule (p. 187), Buzengeiger, Uhr (188), u. Ramis (p. 189). (3) Behrens und Bohnenberger's Electrometer (p. 90). (4) Auszug aus einem Schreiben d. von Jager an Prof. Gilbert (p. 95). (*Gilbert's Ann. et Phys.* li. 182.) *Leipzig*, 1815

Untersuch. über d. Einwirk d. geschloss. elektrischen Kreises auf d. Magnetnadel. 8vo. (*Gilbert's Ann.* lxvi. 1820.) *Leipzig*, 1820

† **Gilii**, F. L. Memoria fisica sopra il Fulmine Caduto in Roma sulla casa dei P. P. Filippini di S. Maria in Vallicella, detta comunemente la chiesa nuova nel di 26 Novembre 1781. 12mo. 28 pp. *Roma*, 1782

† Breve ragionamento sopra il conduttore . . innalzato sulla Basilica di Sta. Maria degli Angioli. . . 8vo. 22 pp. *Roma*, 1793

† **Gillet-de-Laument.** Account of an Aerolite which fell in Moravia, and a mass of Native Iron which fell in Siberia. 8vo. 2 pp. (*Phil. Mag.* xlvii. 174.) *London*, 1816

Gillet et **Saintard.** Sur un nouveau système de Télégraphie électrique. 4to. (*Comptes Rendus*, xx. 1573.) *Paris*, 1845

† **Gillies**, &c. Account of some Electrical Phenomena, recently communicated to the Royal Society of Edinburgh. 8vo. 3 pp. (*Phil. Mag.* xlv. 69.) *London*, 1851

Gilliss, J. M. Magnetical and Meteorological Observations made at Washington, &c. 8vo. *Washington*, 1845

† The U. S. Naval Astronomical Expedition to the Southern hemisphere during the years 1849, 1850, 1851, 1852. Vol. vi. Magnetical and Meteorological Observations under the direction of J. M. Gilliss, Superintendent. 4to. 420 pp. *Washington*, 1856

Gilly und **Eytelwein.** Kurze Anleitung, auf welche Art Blitzableiter an d. Gebäuden anzubringen sind. 8vo. 3 plates. *Berlin*, 1798

Kurze Anleit. &c. (Blitzableiter) 8vo. 3 plates. *Berlin*, 1802

Kurze Anleit. auf welche Art. Blitzableiter an d. Gebäuden anzubringen sind. 3e Aufl. 8vo. *Berlin*, 1819

Gilpin, G. Observations on the variation and on the dip of the Magnetic needle, made at the apartments of the Royal Society, between 1786 and 1805, inclusive. 4to. (*Phil. Trans.* 1806.) *London*, 1806

Ginge, A. Om nordly sets indflydelse paa magnetnaalens declination. (*Skrifter det Kiöbenhavenske Selsk. Nye Saml.* iii. 531.) *Kiobenhavn*

Gintl, W. Der transportable Telegraph für Eisenbahnzüge. 8vo. 8 pp. 3 plates (*Aus den Sitzungsberichten der math.-naturw. Cl. der k. Akad. der Wiss. Wien* vi. Bd. iv. Heft. p. 460.) *Wien*, 1851

Der Elektro-Chemische Schreib-Telegraph auf die gleichzeitige Gegen-Correspondenz an einer Drahtleitung angewendet. 8vo. 18 pp. 6 plates. (*Aus den Sitzungsberichten 1854 der k. Akad. der Wissenschaften.*) *Wien*, 1855

† **Giobert**, G. A. Articolo di lettera al Brugnatelli sopra diversi argomenti Fisico-Chimici. 8vo. 4 pp. (*Gior. Fis. Med.* i. 188.) *Pavia*, 1792

Invention d'une pile de charge, ou batterie galvanique, et isolement des fonctions de la pile. 8vo. (*Bibliot. Ital.* iv. 121. *Extrait du Jl. de Chim. de Van Mons*, xiv. 200.) *Turin*, 1804

† Recherches sur l'action que le fluide galvanique exerce sur différents fluides aériformes. (Lues le 6 prairial, an. 11.) 4to. 13 pp. (*Mémoires de Turin, Anns.* 12 *et* 13.) *Turin*, 1805

(*Vide* also Julio and others.)

Gioberti. (*Vide* Michelotti and Gioberti.)

Gioja, Flavio. Pilot of Amalfi; falsely called Inventor of the Compass in 1302 or 1303. (*Vide Klaproth. Letter to Humboldt, Paris*, 1834.)

Giordano, G. Batorcometro. 4to. *Napoli*, **1863**

Giorgi, Eus. Über Blizableiter. (*Vide Majocchi Annali*, viii. 178.)

Giorgini G. Elettro doratura Italiana. (*Indicatore economico* 17 *Maggio.*) *Modena*, **1844**

Giornale Agrario della Toscana ed Atti dei Georgofili. *Firenze*, **1827**

Giornale Enciclopedico di Vicenza. (The title from 1783 to 1784 is *Nuovo Gle. Enciclop.* Contains works of Toaldo, &c.) *Vicenza*, **1779** *to* **1784**

Giornale di Fisica. . . (*Vide* Brugnatelli, L. and others, 1808-17, and Brugnatelli, G. and others, 1818-27.)

Giornale di Pavia. In continuation by Brugnatelli, G. and Configliachi.

Giornale dell' Italiana Letteratura. 66 vols. 8vo. (*Vide* Da Rio for some Electrical Articles.) *Padova*, **1802-28**

Giornale Letterario Scientifico Modenese. (Often referred to by Grimelli.)

† **Giornale Letterario ossia Progressi dello Spirito umano nelle Scienze,** &c. . . Contains some Articles on Electricity. 4to. (Anon., Toaldo, Giarducci printed in 1783.) **1783**

Giornale dei Letterati d'Italia. Zeno, Editor. 12mo. *Firenze*, **1710**

(*The Editor of the "Storia Giornale" says at* p. 261 : "In tom. iv. part iv. art. 6, in tom. v. part i. art. 2, and part ii. art. 6 in 1748, *I Giornalisti danci l'Istoria della Elettricità.*")

Giornale Toscano di Scienze, Med. Fis. e Nat. *Pisa*, **1840**

† **Giovene**, G. M. Osservazioni elettrico-atmosferiche e barometriche, insieme paragonate Presentata. . . (17 Pratile, Ann. vii.) 5 Guigno, 1798. 4to. 34 pp. (*Mem. Soc. Ital.* viii. part i. 85 pp.) *Modena*, **1799**

† Appendice alle osservazioni elettrico-atmosferiche e barometriche comparate. "Un mero accidente impedì che essa Appendice fosse colle Osservazioni Medesime dell' Autore nel tomo viii. Nota del Segretario." (*Ricuperata il di* 21 *Ottob.* 1801.) 4to. 7 pp. (*Mem. Soc. Ital.* ix. 438.) *Modena*, **1802**

An Experiment on the natural production of Salts by means of natural Electromotors. (*Bibliot. Ital. in* vol. xli. p. 238.) **1826**

Di alcuni fenomeni meteorol. della Puglia Peucezia. Memoria postuma ricevuta 22 Maggio, 1837. 4to. (*Ital. Soc. Mem.* xxii. p. 1, Pte. Fisica.) *Modena*, **1841**

† Elogio storico del Canonico Arcipreto Giuseppe Maria Giovene scritto dall' A. Tripaldi. 4to. 33 pp. (*Mem. della Soc. Ital.* tom. xxii. p. 1.) *Modena*, **1841**

† **Giquel**, E. Traité de déviation des Compas à bord des navires, renfermant de grandes quantités de fer. 8vo. 140 pp. 5 plates. *Paris*, **1868**

Girarbon. Machine Electrophorique. (*From Du Moncel, who gives no title, date, &c.*)

† **Girardi**, M. Saggio di osservazioni anatomiche intorno agli organi elettrici della Torpedine. Al Gio. Gott. Walter, Berlino. 4to. 18 pp. 2 plates. (*Mem. Soc. Ital.* iii. 553.) *Verona*, **1786**

Girardin. On an Electric Machine. "Zur pos. u. neg. Electricität." (*Nouv. de la Répub. des Lettres et des Arts*, 1779.) **1779**

De l'application de l'Electricité aux . . . maladies. (*From Guitard.*) *Paris*, **1823**

Girou de Buzareingues, L. F. C. Influence des déboisements sur le système météorologique du Dép. de l'Aveyron. (*Feuille villageoise de l'Aveyron*, 1835.) *Aveyron*, **1835**

† **Gisborne**, Fr. Telegraphic communication with India. 8vo. 16 pp. *London*, **1868** ?

† **Gisler**, Nils. Beschreibung eines Glanzes in der Luft mit Donner, der in Westnorrlande den 13 Jan. 1763, wahrgenommen worden. 8vo. 3 pp. (*K. Schwed. Akad. Abh.* xxv. 65.) *Hamb. and Leipzig*, **1763**

Giuli, G. Sull' influenza che sembrano avere le correnti elettriche per ristabilire la salute in alcune malattie. 8vo. *Bologna*, 1840

† Della influenza che sembrano avere le correnti elettriche per ristabilire la salute in alcune malattie, dietro l'uso dei bagni d'acqua salina, ed in ispecie di quelle di Monte Catini in Toscana. Mem. letta alla prima riunione degli Scienziati Italiani, in Pisa, Ottobre, 1839. 4to. 12 pp. (*Ann. del Reg. Lomb.-Veneto*, x. 30.) *Padova*, 1840

Nuovo metodo per scuoprire il ferro nelle acque minerali, anche in quantità minima. 8vo. (*Ital. Soc. Mem.* xxiii. (11). *Inserita nel* tom. vi. *dei Nuovi Annali delle Scienze naturali Bologna.*) *Bologna*, 1842

† Giuli, G., e Santi-Linari. Lettera del Giuli al Fusinieri e Lettere del Santi-Linari al Giuli. 4to. 2 pp. (*Ann. del Reg. Lomb.-Veneto*, ix. 200.) *Venezia*, 1839

(*This last letter concerns many of his experiments in electro-magnetism, &c.*)

† Giulio. Sur les effets du fluide galvanique appliqué à différentes plantes. . . Extrait d'un mémoire lu à la classe des sciences exactes de l'Acad. le 29 Pluviose, an. xi. 8vo. (*Biliot. Ital.* (*and Julio, &c.*), i. 28.) *Turin*, 1803

Rapport présénté à l'Acad. de Turin, sur la tête et le tronc de trois hommes. (*Volta's copy.*) 1802

† Rapport lu à l'Acad. de Turin, sur la puissance stimulante de l'électricité ordinaire et du galvanisme. 8vo. 6 pp. (*Bibliot. Ital.* iv. 25.) *Turin*, 1804

† Giulio e Rossi. Estratto di alcune esperienze fatte dai Sig. Giulio e Rossi. Movimento del Cuore di animali. (Per mezzi galvanici.) 8vo. 6 pp. (*Gior. Fis. Med. di Brugnatelli*, tom. i. dell an. 1793, p. 82.) *Pavia*, 1793

De excitabilitate contractionum in partibus musculosis involuntariis ope animalis electricitatis. 4to. (*Mem. d. Turin*, xi. 34, pro 1792-99.)

(*Vide* also Julio, &c. and Vassalli-Eandi.) *Turin*, 1800

Glanvill, Josh. Sceptis scientifica; or Confest Ignorance the Way to Science. (*From T. F. Cooke's Authorship of the Practical Elect. Tel.* p. 75.) 1665

Note.—This work contains a very evident derivation from Famianus Strada's mere poetical fantasy, relative to communication between two friends, at a distance from each other, by means of magnetic needles, &c., having no conducting connexion.

Gloesener. Mémoire sur une Horloge magnéto-électrique, sur les Télégraphes électriques, et sur un appareil magnéto-électriques. 4to. (*Comptes Rendus*, xxvi. 336, and xxvii. 23.) *Paris*, 1848

Elektro-magnetischer Chronograph. 1849

† Recherches sur la Télégraphie électrique. 4to. 124 pp. 12 plates. *Liége*, 1853

Télégraphe chimique. 8vo. *Liége*, 1853

Télégraphie à aiguille perfectionnée. 8vo. 1 plate. 1857

† Traité général des applications de l'Electricité. Tom. i. 8vo. 18 plates. *Paris et Liége*, 1861

Traité général des applications de l'Electricité. 2 vols. 8vo. Plates. *Paris*, 1863

"Glosterian." (*Vide* Anon. Meteorolog. Phen. various.) 1823

Glover, J. Over d. oospro ng d. vreemde delfstoffen en h. regenen v. stoenen, en proeve eener geschid. d. menschh. naar de rede. 8vo. 94 pp. *Hard.* 1805

† Electrical Shocks from a Cat. 8vo. 2 pp. (*Phil. Mag.* lx. 467.) *London*, 1822

Gmelin, Christian Gottlob. *Born October* 12, 1792, *Tubingen; died May* 13, 1860, *at Tubingen.*

Experimenta electricitatem quæ contactu evolvitur spectantia. 8vo. *Tubingen*, 1820

Analys. d. Turmalius von Karingsbricka. 8vo. (*Schweigger's Journ.* xxxi. 1821.) *Nürnburg*, 1821

Gmelin, Christian Gottlob.—*continued.*

Über d. Coagulat. d. Eiweisses durch galvan. Electricität. 8vo. (*Schweigger's Journ.* xxxvi. 1822.) *Tübingen*, 1822

† Analyses of Tourmalines. 8vo. 2 pp. (*Phil. Mag. or Annals*, iii. 460.) *London*, 1828

Handbuch der Chemie. Fortsetzung v. List, Lehmann u. Rochleder. Parts 45 to 58, vol. iii. 8vo. *Heidelberg*, 1858-61

Gmellin, J. F. Einleitung in die Chemie. 2te Abth. *Nürnburg*, 1780

Geschichte der Chemie seit dem Wiederaufleben der Wissenschafter bis an das Ende der 18 Jahrhund. 8vo. *Göttingen*, 1797-99

† Prælectio de columnæ metallicæ a Volta inventæ effectibus chimicis. Habita, 13 Nov. 1803. 4to. 55 pp. (*Commentat. Soc. Göttingensis*, xv. *Phys.* p. 38.) *Göttingen*, 1800-3

† **Gmellin**, Ferd. Gottlob. Diss. sistens observat. physicas chimicas de Elect. et Galv. 8vo. 62 pp. *Tübingen*, 1802

Gmelin, Leopd. Handbuch d. theoret. Chemie. 2 vols. 8vo. *Frankfurt a. M.*, 1817-19

Handbuch d. theoret. Chemie. 2nd edition. 2 vols. *Frankfurt*, 1821-22

Handbuch d. theoret. Chemie. 2 vols. 8vo. 3rd edition. *Frankfurt*, 1827-29

Über e angebl. meteorische Masse. 8vo. (*Gilbert's Ann.* lxxiii. 1823.) *Leipzig*, 1823

† Art "Phosphor" in Gehler's Wörterbuch. 1ste Abtheil. viii. Bd. 8vo. 8 pp. *Leipzig*, 1833

Versuch einer elektro-chemisch. Theorie. 8vo. (*Poggendorff, Ann.* xliv. 1838.) *Leipzig*, 1838

Handbook of Chemistry by H. Watts. 15 vols. 8vo. *London*, 1848-61

Handbook of Chemistry, translated and edited by Henry Watts. 1871

Gmelin and **Schaub.** Effets chimiques de la colonne métallique, par M. Gmelin expériences galvaniques de M. Schaub. (*Magasin Encyclopédique*, tom. vi. p. 201.)

† **Göbel**, Severin. De Succino. Libri duo. (*Each alternate page only is numbered.*) 12mo. 60 pp. *Turin*, 1558

At the end of this are a few pages with the title "De Bitumine et cognatis ei, Naphtha."

Goclenius, R., jun. Tract. de magnetica curatione vulnerum, citra ullam superstitionem et dolorem et remedii applicationem, &c. Marpurgi, 1608. 8vo. (*From Watt.*) *Marp.* 1609

† Mirabilium naturæ . . . Adjecta est in fine brevis et nova Defensio magneticæ curationis vulnerum ex solidis principiis. 12mo. 303 pp. *Francofurti*, 1625

Godigno, N. De Abissinorum rebus. (p. 67.) (*From Zantedeschi, Trattato*, i. 209.) 1615

Godin. Table alphabet. . . . de l'Acad. Rle. 4 vols. 4to. 1666—1730

† **Goebel**, A. Untersuchung eines am 29 April, 11 Mai, 1855, auf Oesel niedergefallenen Meteorsteines. 4to. (*Archiv. f. d. Naturk. Liv.-Esth. u. Curlands.* Bd. i. Dorp. 1854.) *Dorpat*, 1855

† Über Aerolithenfälle in Russland aus früheren Jahrhunderten. Lu le 20 Décembre, 1866. 4to. 15 pp. (*Bulletin de l'Acad. Imp. de St. Pétersb.* xi. 527, 1867.) *Pétersbourg*, 1867

† **Goldschmidt**, B. Results of the daily observations of Magnetic Declination during six years at Göttingen. 8vo. 12 pp. 1839

Üb. d. magnet. Declination in Göttingen. 8vo. 31 pp. *Göttingen*, 1845

† **Golubew**, A. Über die Erscheinungen, welche elektrische Schläge an den sogenannten farblosen Formbestandtheilen des Blutes hervorbringen. (Vorgelegt in der Sitzung am 16 April, 1863.) 8vo. 18 pp. 1 plate. (*Sitzb. d. k. Akad. d. Wissensch. April-Heft Jahrg.* 1863, lvii.) *Wien*, 1863

† **Gonella**, G. B. Osservazioni sugli apparati elettro-telegrafici. 8vo. 24 pp. *Torino*, 1850

† **Gonon**, E. Mémoire sur le système télégraphique nouveau . . . Lu à l'Acad. 12 Fev. 1844. 4to. 102 pp. 1 plate. *Paris*, 1844

† Des Télégraphes aériens et électriques. Questions. 4to. 107 pp. 1 plate. *Paris*, 1845

† **Gonon** et **Gauguier**. Lettres sur l'importante question de la Télégraphie. 4to. 40 pp. *Paris*, 1850 ?

† **Goransson**, B. Observationer öfver Magnetiska Inclinationen i Lund. 8vo. 30 pp. *Lund*, 1865

Gordon, Andreas. *Born July* 12, 1712, *at Cofforach, co. Angus, Scotland; died August* 22, 1751, *at Erfurt.*

Phænomena electricitatis exposita. 8vo. 88 pp. 2 plates. *Erford*, 1744

Tentamen explicationis electricitatis. 88 pp. *Erford*, 1745

Philosophia. 3 parts. 8vo. *Augsburg*, 1745

Versuche einer Erklärung der Eletricität. 8vo. *Erford*, 1745

† Versuche einer Erklärung der Eletricität. Tweyte Auflage mit neuen Versuchen und Instrumenten vermehret. 8vo. 112 pp. 3 plates. *Erfurt*, 1746

† Phænomena electricitatis exposita. 3rd edition. 8vo. 88 pp. 3 plates. (*Appendix ad Physicam.*) *Erford*, 1746

Epistola ad amicum Eisentrantium. (*From Krunitz.*) *Erford*, 1748

Phisicæ experimentalis elementa (in usum Acad. Erfordiæ. 2 vols. 8vo.) (*From Poggendorff*, i. 928.) *Erfordiæ*, 1751-53

Gordon, J. E. New Anemometer for force and direction at any distance from the Vane. (*Phil. Mag. for January*, 1872.)

† **Gore**, G. Theory and practice of Electro-deposition. . . . 8vo. 104 pp. (*Orr's Circle of the Sciences*, p. 891.) *London*, 1856 ?

† On the electrical relations of Metals, &c. in fused substances. 8vo. 6 pp. (*Phil. Mag. for June*, 1864.) *London*, 1864

† On the properties of electro-deposited Antimony. 8vo. 10 pp. (*Journal of the Chemical Society.*) *London*, 1843

(*Vide* also Anon. Electro-Metallurgy.)

Gorno, P. (Notice of) Memoria sui Temporali. 8vo. (*Comment. Ateneo Brescia, vol. pr. in* 1824, p. 34.) *Brescia*, 1824

(Notice of or) Memoria sulla Elettricità delle Nubi. 8vo. (*Comment. Ateneo Brescia, vol. printed in* 1825 *for* 1824, p. 72.) *Brescia*, 1825

† Sui corpi idio elettrici, Memoria. 8vo. 10 pp. (*Comment. dell' Ateneo di Brescia per l'ann. accad.* 1827. *Printed in* 1828, p. 55.) *Brescia*, 1828

† Sul freddo dei Temporali. Notizia della sua Memoria. 8vo. 19 pp. (*Bibliot. Ital.* xcix. 84, *and in Comment. dell' Ateneo di Brescia, vol. for* 1830, *printed in* 1831, p. 124.) *Brescia*, 1831

† Nuove informazioni sull' origine del freddo dei Temporali. Memoria. 8vo. 4 pp. (*Bibliot. Ital.* xcix. 84, *and in Comment. dell' Ateneo di Brescia, vol. for* 1832, *printed in* 1833, p. 41.) *Brescia*, 1833

† **Gostling**, W. Letter to P. Collison concerning the Fire Ball seen by Lord Beauchamp in Kent. *Dated Dec.* 13, 1741, *Canterbury.* 4to. 2 pp. (*Phil. Trans.* xli. 872.) *London*, 1739-40-41

(*Vide* Beauchamp.)

Goth. G. Ub. d. Hagelstürme in Steiermark im Juli 1846. Nebst Haidingers Nachtrag zu dieser Abhandlung.

Gottingen, Societas Scient. Commentarii Soc. Reg. Scient. Gottenq. 4to. 28 vols. *Göttingen*, 1752-1808

Teutsche Schriften von der Kön. Societät de Wissensch. zu Göttingen. 8vo. *Göttingen*, 1771

Gottingische Gelehrte Anzeigen. 8vo. (*From Libri Sale Cat.* p. 380.) *Göttingen*, 1814-25

Gottingisches Magazin. (*Vide* Lichtenberg u. Forster, 1780-1785.)

† **Gottschalk.** Tarif für telegraphische Depeschen von Bremen nach allen Stationen d. deutsches terreischen Telegraphen Vereins und nach den ubrigen europaeischen und aussereuropaeischen Staaten. 16mo. 60 pp. *Bremen*, 1868

† **Gouge, A.** Beiträge zur Lehre vom Magnetismus Bericht einer aus Mitgliedern der K.K. Gesellschaft der Ärzte zu Wien bestehenden Commission erstattet. 8vo. 198 pp. *Wien*, 1846

† **Gough, J.** Remarks on Hygrometry, and the Hygrometer of J. Berzelius. 8vo. 6 pp. 1 plate. (*Phil. Mag.* xxxiii. 177.) *London*, 1809

Gould, Benjamin Apthorp. *Born September 27, 1824, at Boston, U.S.*

† On the velocity of the Galvanic Current in telegraphic wires. In a Report to Bache. 8vo. 28 pp. 1 plate. (*American Journal of Science*, 2nd series, xi. Jan. 1851.) *New Haven, U.S.* 1851

Goulier, C. M. Etudes géometriques sur les étoiles filantes. 8vo. 154 pp. 2 plates. *Metz*, 1868

† **Gounelle, E.** Observations sur les Expériences de M. Guillemin. 8vo. 28 pp. 1 plate. *Paris*, 1863

(*Vide* also Fizeau and Gounelle.)

† **Gourdon.** Notice sur l'Elect. employée comme moyen thérapoutique. 8vo. 12 pp. *Paris*, 1838

† **Govi, Gilb.** Romagnosi e l'Elettro-magnetismo. Ricerche storiche. 8vo. 16 pp. (*Estratto dagli Atti della Reale Accad. delle Scienze di Torino*, vol. iv. 7 *April*, 1869.) *Torino*, 1869

(*Note.—Govi shows clearly at page* 8, *&c. that Romagnosi's experiment had no connection with Oersted's, and was not magnetical. The needle was repelled by mere electric action (of a pile). It was in fact a modification or repetition of Milner's experiment in* 1783, *or of Peltier's, which was a repetition of Milner's.—F. R.*)

† L'Aurora boreale. 8vo. 4 pp. (*Estratto dalla Gazzetta Ufficiale del* 28 *Ottobre*, 1870.) *Firenze*, 1870

Gradis, B. Dorure et Argonture électro-chimiques. 8vo. 24 pp. *Paris*, 1851

† **Graham, D.** (Major). Observations of the Magnetic Dip made at several positions, chiefly on the South-western and North-eastern frontiers of the United States; and the Declination at two positions on the River Sabine, in 1840. Read August 16, 1844. 4to. 52 pp. (*Trans. Amn. Society*, New Series, vol. ix.) *Philadelphia*, 1846

An account of observations made of the variation of the Horizontal Needle at London, in the latter part of the year 1722 and the beginning of the year 1723. 4to. (*Phil. Trans.* 1724, p. 96.) *London*, 1724

Observations of the Dipping Needle made at London in the beginning of the year 1723. 4to. (*Phil. Trans.* 1725, p. 332.) *London*, 1725

† Some observations, made during the last three years, of the quantity of the variation of the Magnetic Horizontal Needle to the Westward. Read April 21, 1748. 4to. 2 pp. (*Phil. Trans.* xlv. 279.) *London*, 1748

† **Graham, T.** On the finite extent of the Atmosphere. 8vo. 3 pp. (*Phil. Mag. or Annals*, i. 107.) *London*, 1827

Elements of Chemistry, by Watts. 2 vols. 8vo. *London*, 1850-59

† **Grailich**, Jos., and **Lang**, V. Untersuchungen über die physicalischen Verhaltnisse Krystallisirter Körper. 1. Orientirung der optis. Elasticitätsaxen in den Krystallen des rhombischen Systems. Vorgel. in d. Sitz. vom 12 Juni, 1857. 8vo. 76 pp. 7 plates. (*Sitzb. Wien Acad.* vol. xxvii. 1 Heft.) *Wien*, 1857

† Untersuchugen üb. d. Physicalischen Verhaltnisse Krystallisirter Korper. 2. Orientirung der magnetischen. Verhaltnisse in Krystallen des rhombischen Systems Vorgetragen in d. Sitzung vom 8 July 1858. 8vo. 25 pp. (*Sitzungsb. Wien Acad.* vol. xxxii. No. 21.) *Wien*, 1858 ?

† Untersuchungen üb. d. physikalischen Verhältnisse Krystallizirter Körper. 4. Über die Beziehung zwischen Krystallform, Substanz und physikilischen Verhalten. 8vo. 82 pp. Vorgetragen in der Sitzung am 7 Oct. 1858. (*Sitzungsb. d. Wien Acad.* xxiii. No. 27.) *Wien*, 1858 ?

Gralath, Daniel. *Born June* 8, 1739, *at Danzig; died August* 10, 1809, *at Dansig*.

† Geschichte der Elektricität. 1. Abschnitt. 4to. 130 pp. 1 plate. (*Versuche u. Abhandl. der Naturforsch. Gesellschaft in Danzig*, Th. i. S. 175.) *Dansig*, 1747

† Nachricht von einigen elektrischen Versuchen. (Balance or scales used in 1746.) 4to. 29 pp. 1 plate. (*Versuche u. Abhandl. der naturforschenden Gesellschaft in Danzig*, Th. i. No. xiii. p. 506.) *Dansig*, 1747

† Geschichte der Elektricität ii. Abschnitt. 4to. 106 pp. 1 plate. (*Versuche u. Abhandl. der Naturforsch. Gesellschaft in Dansig*, Th. ii. S. 355.) *Danzig*, 1754

† On Leyden Phial. (*Danzig Mem.* ii. 433.)

† Gralath's account of Experiments merely from Priestley. (*Danzig Memoirs*, vol. ii. p. 438.)

† Electrische Biliothek. St. i. 4to. 28 pp. (*Versuche u. Abhandl. Naturforsch. Gesellsch. in Danzig*, Th. ii. S. 525.) *Dansig*, 1754

† Electrische Bibliothek. St. ii. 4to. 64 pp. (*Versuche u. Abhandl. der Naturforsch. Gesellsch. in Danzig*, Th. iii. S. 265.) *Dansig*, 1756

Geschichte der Electricität. iii. Abschnitt. 4to. 69 pp. (*Versuche u. Abhandl. Naturforsch. Gesellschaft in Dansig*, Th. iii. S. 492.) *Danzig*, 1756

Grandami (Grandamicus), Jacques. *Born* 1588, *at Nantes; died February* 12. 1672, *at Paris.*

† Nova demonstratio immobilitatis terræ patita, ex virtute magnetica. 4to 170 pp. Plates. *Flexiæ*, 1645

Grantham. (*Vide* Liverpool Compass Committee.)

Grapengieser, C. J. C. Versuche den Galvanismus, zur Heilung einiger Krankheiten anzuwenden angestellt und beschrieben von G. 1st ed. 8vo. Plates. *Berlin*, 1801

† Versuche den Galvanismus zur heilung einiger Krankheiten anzuwenden. 2 Auflage. 8vo. 230 pp. 2 Plates. *Berlin*, 1802

Graperon. Sur un nouveau galvanomètre, avec une notice sur quelques faits galvaniques. 8vo. (*Journ. du Galv.*) 1803

Réflexions sur une expérience galvanique. 8vo. (*Journ. du Galv.* No. iii. p. 101.) *Paris*

S'Gravesande, Wilhelm Jacob. *Born September* 27, 1688, *at Herzogenbusch; died February* 28, 1742, *at Leyden.*

† Œuvres philosophiques et mathématiques. Publiées par S. Allamand. 2 vols. 4to. *Amsterdam*, 1774

† Eléments de Physique, par Joncourt. 2 vols. 4to. plates. *Leide*, 1846

Gravier. (*Vide* Coulvier-Gravier.

Gray, Stephen. *Born end of seventeenth century, in England; died February* 15, 1736, *at London.*

New Electrical experiments. 4to. (*Phil. Trans. Abd.* vi. part ii. p. 7.) 1720

† An account of some new Electrical experiments. 4to. 4 pp. (*Phil. Trans.* xxxi. *for* 1720-21.) *London*, 1723

Farther experiments concerning Electricity. (*Phil. Trans. Abd.* vi. part iv. p. 96 *in the vol. marked* vii.) *London*, 1731

Farther experiments concerning Electricity. (*Phil. Trans. Abd.* vi. part ii. p. 24.) *London*, 1731

Concerning the Electricity of water. (*Phil. Trans. Abd.* vi. part ii. p. 22.) *London*, 1731

More experiments concerning Electricity. (*Phil. Trans. Abd.* vi. part ii. p. 9.) *London*, 1731

† A letter to Mortimer, containing several experiments concerning Electricity, by Gray, S., dated Charter House, February 8, 1730-31. 4to. 27 pp. (*Phil. Trans.* xxxvii. 18.) *London*, 1731

† A letter concerning the Electricity of Water, from Gray to Mortimer, C., dated Charter House, January 20, 1731-32. 4to. 4 pp. (*Phil. Trans.* xxxvii. 227.) *London*, 1731-32

† A letter from Gray to Mortimer containing a farther account of his experiments concerning Electricity. Dated Charter House, June 7, 1732. 4to. 7 pp. (*Phil. Trans.* xxxvii. 285.) *London*, 1731-32

† Two letters from Gray to Mortimer, containing farther accounts of his Experiments concerning Electricity. First letter dated Charter House, October 15, 1732. 4to. 11 pp. (*Phil. Trans.* xxxvii. 397.) *London*, 1731-32

Experiments and Observations upon the Light, &c. (*Phil. Trans. Abd.* viii. 395.) 1734-35

Some experiments relating to Electricity. (*Phil. Trans. Abd.* viii. 401.) 1735

Experiments and observations upon the Light that is produced by communicating Electrical Attraction to animal or inanimate bodies, together with some of its most surprising effects. 4to. (*Phil. Trans.* 1735, pp. 16 and 166.) *London*, 1735

Concerning the Revolutions of small Pendulous Bodies, &c. (*Phil. Trans. Abd.* viii. 403.) 1735-36

Electrical Experiments taken from his mouth by Dr. Mortimer. (*Phil. Trans. Abd.* viii. 404.) 1735-36

Lettre de Gray à Mortimer. 4to. (*Translation from Phil. Trans. by Bremond.*) *Paris*, 1738

† A letter from S. Gray to Mortimer . . . containing some experiments relating to Electricity. 4to. 5 pp. (*Phil. Trans.* xxxix. *for* 1735-36, p. 166.) *London*, 1738

† Mr. Stephen Gray . . . his last letter to Granville Wheeler, Esq. . . . concerning the revolutions which small pendulous bodies will, by Electricity, make round larger ones from west to east, as the planets do round the sun. Dated February 6, 1735-36. 4to. 1 p. (*Phil. Trans.* xxxix. for 1735-36, p. 220.) *London*, 1738

† An account of some Electrical experiments intended to be communicated to the Royal Society by Mr. S. Gray, taken from his mouth by C. Mortimer, M.D., R.S. Secr. on February 14, 1735-36, being the day before he died. 4to. 4 pp. (*Phil. Trans.* xxxix. for 1735-36, p. 400.) *London*, 1738

Greatrakes, V. A brief account of Mr. V Greatrakes, and divers of the strange cures by him lately performed. 4to. *London*, 1666

Green, George. *Born July* 14, 1793, *at Nottingham; died March* 31, 1841, at *Sneinton.*

An Essay on the application of Mathematical Analysis to the theories of Electricity and Magnetism. 4to. 72 pp. *Nottingham*, 1828

(*Latimer Clark says in his Catalogue, "one of the most important works ever written on Electricity."*—F.R.)

Green, J. Electro-Magnetism. 12mo. 210 pp. Plate. *Philadelphia*, 1827

Green, W. P. Selection of papers on the subject of fixed Lightning Conductors to the masts of H.M.'s Navy, constructed so as to pass from the truck to the keelson . . . illustrated by engravings, &c. 8vo. *London*, 1824

On Lightning Conductors for Ships. 1828

† Greenwood, J. An account of an Aurora Borealis seen in New England on the 22nd October, 1730, by Greenwood, J. Communicated in a letter to the late Dr. Rutty. Dated Harvard College, October 24, 1730. 4to. 15 pp. 1 plate. (*Phil. Trans.* xxxvii. 55.) *London*, 1831-32

Greg, R. P. An Essay of Meteorites. 8vo. 40 pp. (*Phil. Mag. November-December*, 1854.) *London*, 1854

† An Essay on Meteorites. 8vo. 40 pp. (*Probably a reprint.*) *Manchester ?* 1855

† Catalogue of the collection of Meteorites belonging to R. P. Greg, Esq. 8vo. 8 pp. *Manchester*, 1865

Gregorio, D. Lettera intorno all' elettricità.

Greimble, Dissertatio physica de genu progressu et effectibus fulminis. 12mo. *Agust. Vind.* 1759

† Greiss, C. B. Über d. Magnetismus der Eisenerze. 8vo. 18 pp. (*Poggendorff's Ann.* xcviii. 1856.) *Wiesbaden*, 1856

† Greiss, C. Zur Geschichte d. Magnetismus. 4to. *Wiesbaden*, 1861

Grellois, E. Notice sur les observations ozonométriques faites pendant neuf mois, en 1855 et 1856, à la pointe du Sérail, à Constantinople. 4to. 13 pp. (*Ext. de l'Annuaire de la Soc. Météorol. de France*, tom. v. p. 58, séance 14 Av. 1857.) *Versailles*, 1857

† Ozonomètre. Résultats de quelques expériences faites à Thionville. 4to. 7 pp. (*Ext. de l'Annuaire de la Soc. Météorol. de France*, tom. v. p. 183. *Séance du* 14 *Juillet*, 1857.) *Versailles*, 1857

Gren, Friedrich Albert Carl. *Born May* 1, 1760, *at Bernburg; died November* 26, 1798, *at Halle.*

Apparat, durch d. elektr. ? Funken brennbare u. lebens luft aus d. Wasser zu erhalten. 8vo. (*Gilbert's Ann. d. Physik*, ii. 1790.) *Leipzig*, 1790

Journal der Physik. 8 vols. 8vo. *Leipzig*, 1790-93

Neues Journal der Physik. 4 vols. 8vo. *Leipzig*, 1795-97

Grundriss der Naturlehre, § 1408. 8vo. *Halle*, 1797

† Grundriss der Naturlehre (6 Aufl.) hersg. von K. W. G. Kastner. 8vo. *Halle*, 1820

(*Vide* also Prevost, 1794.)

Grewingk, Schmidt. Uber die Meteoritenfälle von Pillistfer, Buschhof und Igast in Liv - und Kurland. 8vo. 140 pp. 2 plates and map. *Dorpat*, 1864

Gribel, Eduard Wilhelm. *Born May* 6, 1816, *at Stettin; died July* 18, 1856, *at Reichenbach.*

† De relatione actionum caloris et electricitatis. (Dissert. inaugur.) 4to. 28 pp. *Berol*, 1837

† Grieb, C. F. Die Wunder der elektrischen Telegraphie. 16mo. 3 plates. *Stuttgart*, 1850

Griffith, J. W. (*Vide* Plücker, 1847.)

† Grigolato, G. Alcune ricerche teoriche sulla origine e natura dell' Ozono. Memoria 4to. 12 pp. (*Mem. . . . dell' Ateneo di Treviso*, vol. v. p. 71.) *Padova*, 1847

† **Grillenzoni**, C. Di alcuni nuovi esperimenti del Dr. A. Palagi di Bologna, sulle variazioni elettriche a cui vanno soggetti i corpi scostandosi dal suolo, o da altri corpi, ovvero, accostandosi ad essi; ricordo del Dott. C. Grillenzoni. 8vo. 8 pp. (*Estratto dalla Gazzetta Medica Italiana-federativa-Toscana*, tom. iii. ser. ii.)

Grimaldi, F. M. Physico-Mathesis de lumine coloribus et iride aliisque adnexis libri ii. (*Opus. posth.*) 4to. *Bononiæ*, 1665

(*Gatteschi refers to his discovery of the magnetism produced by holding a bar of iron perpendicularly* (*in* 1550) *in this work. Grimaldi died in* 1663.)

† **Grimaldi**, G. Dissertazione (viii.) di . . . sopra al primo Inventore della Bussola. 4to. 25 pp. (*Saggi di Dissertazioni accademiche . . . nell' Accad. Etrusca . . . di Cortona*, tom. iii. p. 195.) *Roma*, 1741

† **Grimelli**, G. Osservazioni ed esperienze elettro-fisiologiche dirette ad instituire la elettricità medica. 8vo. 336 pp. 1 plate. (*Called also "Elettricità Fisio-logico-Medica."*) *Modena*, 1839

Lettera all'. . Amici intorno alle contrazioni che produconsi nell' atto di chiudere, non che in quello di aprire, il circuito prettamente nerveo-muscolare della rana. *Modena*, 1842

Lettera al . . . Bufalini intorno alle contrazioni che ottengonsi nell'atto, di chiudere e di aprire il circuito composto, per l'una parte, di tessuti nerveo muscolari, per l'altro, di un sistema elettromotore idro-metallico. (*Memoria sul Galvanismo.*) *Modena*, 1842

Seguito di osserv. e di esper. Elettro-fisiologiche. *Modena*, 1843

Metodo italiano di elettro-doratura . . . esposto . . . 1843-44. *Modena*, 1844

† Metodo originale Italiano di Elettro-doratura. 8vo. 18 pp. *Modena*, 1844

Memoria concernente varie notizie sperimentali elettrometallurgiche e elettromediche, letta . . . 19 Dicembre, 1843, alla Reale Accad. . . di Modena. 8vo. (*Foglio di Modena* 8 *Feb.* 1844.) *Modena*, 1844

Elettro metallurgia dichiarata e svolta ad uno dei Direttori dei Nuovi Ann. delle Scienze . . che si pubblicano in Bologna. Tom. x. 1843. (*Foglio di Modena* 9 *Maggio*, 1844. *Modena*, 1844

† Storia scientifica ed artistica dell' Elettro-metallurgia originale Italiana con un Saggio teorico-pratico di elettro-metallurgia piana e solida; e un' Appendice lessicologica. 8vo. 192 pp. *Modena*, 1844

† Memoria sul Galvanismo premiata dall' Accad. . . . dell' Istit. di Bologna. 4to. 193 pp. *Bologna*, 1849

Prospetto delle Mem. elettriche e magnet. pubblicate dal Prof. Cav. Stefano Marianini. *Modena*

Grimm, Mélange d'observations galvaniques. 8vo. (*Journal de Chim. d. Van Mons*, No. x. p. 82.) *Bruxelles*

† **Grimm**, C. De maris nocturna lucis emissione. Dissert. inauguralis. 4to. 19 pp. *Hanover*, 1840

Grimm, J. Über die Namen des Donners. Eine academische Abhandlung vorgelesen am 12 Mai, 1863. 4to. 28 pp. *Berlin*, 1855

Grindat. (*Vide* Strype.)

† **Grinwis**, C. H. C. De verdeeling der electriciteit over het oppervlak eens geleiders. 8vo. 72 pp. *Utrecht*, 1858

Grinwis, C. H. C.—*continued.*

† Wiskundige theorie der wrijvings electriciteit. (In 2 Stücken.) 8vo. 266 pp. *Utrecht*, 1869

In Guthe's Bibliotheca, 2 Heft, July bis Dec. 1869, p. 149, *appears the entry :* "*Grinwis C. H. C. : Wiskundige theorie der wrijvings electricitat. 2e stük. Royal* 8vo. (viii. *bl. en bl.* 161—266, *mit 2 tussehen den tekst gepl. houtsneeſig. Utrecht. (J. L. Beijers.)*"

Grischow, Augustin Nathanael. *Born September* 29, 1726, *at Berlin ; died June* 4, 1760, *at St. Petersburg.*

† Observatio insoliti luminis australis Petropoli habita. 4to. (*Novi Comment. Acad. Petrop.* iv. *pro* 1752-53, *printed* 1753, p. 68.) *Petropoli*, 1752-53

Observatio insoliti luminis australis Petropoli habita. 4to. (*Novi Commentar. Acad. Petropolit.* iv. 474.) *Petropoli*, 1758

Grischow. (*Vide* Lomonosow.)

† Griselini, F. Lettera al Padre D. Angelo Calogiera, intorno l'elettricità, e alcune particolari esperienze della medesima. 12mo. 1 plate. *Venezia*, 1747

Observations sur la Scolopendre marine luisante, e la Baillouviana. 8vo. 32 pp. *Venice*, 1750

Gronau, Karl Ludwig. *Born June* 7, 1742, *at Berlin ; died December* 8, 1826, *at Berlin.*

Bemerkungen über Nebel u. Nordschein. (*Schr. d. Gesellsch. naturf.* Fr. vi. 1725.) 1785

Bemerkungen über Gewitter. (*Schr. d. Gesellschaft naturf.* Fr. ix. 1789.) 1789

Boobachtung der Witterung d. Mark Brandenburg. 1 Theil. 8vo. *Berlin*, 1794

Über d. vom Himmel gefallenen Steine. 8vo. *Berlin*, 1804

Grones, G. Memoria sulla Procella avvenuta in Venezia. 24 Giugno. 1822. Letta nell' Ateneo di Treviso 6 Agosto. 8vo. 59 pp. *Venezia*, 1823

Gronov. On the Gymnotus electricus. (*Phil. Trans.* lxv. pt. i. pp. 94 and 102 ; pt. ii. p. 395.) 1760

† Gros, Baron T. B. L. Lettre sur la Télégraphie électrique. 8vo. 31 pp. 18 plates. *Paris*, 1856

Anschauliche Darstellung der electrischen Telegraphie zur Verständlichung des grossen Publicums. In einem Briefe an eine Dame. Nach dem Französischen. 8vo. 38 pp. 18 plates. *Weimar*, 1857

† Anschauliche Darstellung der elektrischen Telegraphie zur Verständlichung der grossen Publicums. In einem Briefe an eine Dame. Nach dem Französischen. Zweite, vermehrte Auflage. 8vo. 54 pp. 18 plates. *Weimar*, 1862

Grosier. Mémoires d'une société considérée comme corps littéraire . . . ou Mémoires des Jésuites sur les Sciences. 3 vols. 4to. *Paris*, 1792

Gross, Johann Friedrich. *Born May* 5, 1732, *at Nagold, Würtemberg ; died February* 5, 1795, *at Stuttgart.*

† Elektrische Pausen. 8vo. 136 pp. 1 plate. (*The plate is in the title-page.*) *Leipzig*, 1776

Précis des Pauses électriques. 4to. (*Journ. de Phys.* x. 1777.) *Paris*, 1777

† Grundsäze der Blizableitungs kunst geprüft, und durch einen merkerwürdigen Fall erläutert. Nach dem Tode des Verfassers heraus gegeben von J. F. W. Widenmann. 8vo. 228 pp. 1 plate. *Leipzig*, 1796

Aufsatze in d. "Tübingen Berichten von gelehrten Sachen." (*From Pogg.* i. 959.)

Grosser, J. H. Fascicul. tentaminum phys. med. electricorum, c. not. 8vo. (*From Heinsius*, ii. 188.) *Würzbg.* 1786

Grosser, J. M. von. Phosphorescentia adamantum novis experimentis illustrata ; üb. d. Leuchten d. Diamenten in Finstern nach neuen Versuchen. 8vo. *Wien*, 1777

† Grossi, L. Ritratti daguerotipi. 8vo. 1 p. (*Giornale I. R. Istit. Lomb.* iv. 278.) *Milano*, 1842

Grothuss, Theodor. *Born January* 20, 1785, *at Leipsig ; died March* 14, 1822, *at St. Gedduts.* (*Poggendorff also calls him Christian Johann Dietrich.*)

† Mémoire sur la décomposition de l'Eau et des corps qu'elle tient en dissolution à l'aide de l'Electricité galvanique. 12mo. 22 pp. (*Volta's copy.*) *Rome*, 1805

† Memoir upon the decomposition of Water, and of the bodies which it holds in solution, by means of Galvanic Electricity. 8vo. 10 pp. 1 plate. (*Phil. Mag.* xxv. 330.) *London*, 1806

De l'influence de l'électricité galvanique sur les végétations métalliques. 8vo. (*Ann. Chim.* lxiii.) *Paris*, 1807

Chem-galvan. Beobacht. 8vo. (*Gehlen's Jorn.* 1808.) *Berlin*, 1808

Über d. elektricität die sich bei andern Zustanden d. Wassers entwickelt. 8vo. *Berlin*, 1810

Uber d. Grenze d. Verbrennlichkeit entzündl. Gasgemenge bei abnehmenden Dichtigkeit, und über d. Farben d. elektr. Funkens in verschiedenen Mitteln. 8vo. (*Schweigger's Jour.* iii. *und* iv. 1811-12.) *Nürnberg*, 1811-12

Versuche u. Ideen über Brennen ; über elektr. Leitungs fähigkeit verschiedener Gase ; über Acidität ; über Morichini's Versuche ; u.s.w. 8vo. (*Schweigger's Journ.* ix. 1813.) *Nürnberg*, 1813

Über d. chem. Wirksamkeit d. Lichts u. d. Electricität, u.s.w. ; merkwürdige galvan. Wasserzersetzung, u.s.w. 4to. 175 pp. 1818

Verstärkungsmittel d. elektr. Wirk. bei gewöhnl. Elektrisirmaschinen. 8vo. (*Scherer's Allgem. Nord. Ann. di Chemie*, iv. 1820.) *Berlin*, 1820

Merkwürd Zersetz. d. Wassers. durch Wasser im Kreise d. Volta'schen Säule. 8vo. (*Schweigger's Journ.* xxviii. 1820.) *Nürnberg*, 1820

Phys.-chemis. Forschungen. 1r. Bd. 4to. *Nürnberg*, 1820

Zwei newe den Elektro-magnetismus betreff. Thatsachen. 8vo. (*Schweigger's Journ.* xxxi. 1821.) *Nürnberg*, 1821

Untersuchung eines, am 30 Juni 1820, im Dünaburger Kreise herabgefallenen Meteorsteins. 8vo. (*Gilbert's Ann.* lxvii. 1821.) *Leipsig*, 1821

† On the Phosphorescent organ of the Lampyris Italica. 8vo. 1 p. (*Phil. Mag.* lix. 67.) *London*, 1822

Also many Papers in German journals which may contain available Electric matter. (*Vide Poggendorff*, i. 959-60.) (*Vide also Grove, W. R.* 1845.)

Grove, William Robert. *Born July* 11, 1811, *at Swansea.*

† On the inaction of Amalgamated Zinc in Acidulated Water. 8vo. 4 pp. (*Phil. Mag.* xv. Aug. 1839, p. 81.) *London*, 1839

† On a small Voltaic Battery of great energy ; some observations on Voltaic combinations, &c., and forms of arrangement ; and on the inactivity of a Copper positive Electrode in Nitro-sulphuric Acid. 8vo. 6 pp. (*Phil. Mag.* xv. *for October*, 1839, p. 287.) *London*, 1839

† On some Phenomena of the Voltaic disruptive discharge. 8vo. 5 pp. (*Phil. Mag.* xvi. *for June*, 1840, p. 478.) *London*, 1840

† Voltaic reaction, or the Phenomenon usually termed Polarization. 8vo. 2 pp. (*Ann. of Elect.* iv. 502.) *London*, 1840

† On some Electro-Nitrogurets. 8vo. 8 pp. (*Phil. Mag.* xix. *for August* 1841, p. 97.) *London*, 1841

Grove, William Robert.— *continued.*

† On a Gaseous Voltaic Battery. 8vo. 4 pp. (*Phil. Mag.* xxi. *for Dec.* 1842.) *London*, 1842

† On the Gas Voltaic Battery. Experiments made with a view of ascertaining the Rationale of its action and its application to Eudiometry. Read May 11, 1843. 4to. 20 pp. 1 plate. (*Phil. Trans. for* 1843, pt. ii. p. 91.) (*Faraday's copy.*) *London*, 1843

† On Grothus's theory of Molecular decomposition and recomposition. 8vo. 2 pp. (*Phil. Mag. for Nov.* 1845.) *London*, 1845

† On the Gas Voltaic Battery. Voltaic action of Phosphorus, Sulphur, and Hydrocarbons. Read June 19, 1845. 4to. 8 pp. 1 plate. (*Phil. Trans. for* 1845, pt. ii. p. 351.) (*Faraday's copy.*) *London*, 1845

† On the correlation of the Physical Forces: being the substance of a course of Lectures delivered in the London Institution in the year 1843. 8vo. 52 pp. (2nd edition, 1850, *vide Rowsell Cat.* N. 166, 1870. There is a third edition, 1855, *vide Zuchold*, p. 167; and a fourth of 1862, *vide Engl. Cat.* p. 318.) (*Faraday's copy.*) *London*, 1846

† Sur certains phénomènes d'ignition Voltaique, etc. . . traduit de l'Anglais par Louyet. 8vo. 27 pp. 1 plate. (*Ext. Bulletin du Musée de l'Industrie*, 4e livre, 1847.) *Paris*, 1847

† On certain phænomena of Voltaic ignition and the decomposition of Water into its constituent gases by Heat. Read Nov. 19, 1846. 4to. 21 pp. 1 plate. (*Phil. Trans. for* 1847.) (*Faraday's copy.*) *London*, 1847

† On the Effect of surrounding Media on Voltaic ignition. Read Dec. 14, 1848. 4to. 11 pp. (*Phil. Trans. for* 1849, pt. i. p. 49.) (*Faraday's copy.*) *London*, 1849

† On the Electro-chemical Polarity of Gases, Read April 1, 1852. 4to. 15 pp. 1 plate. (*Phil. Trans. for* 1852, p. 87.) (*Faraday's copy.*) *London*, 1852

† On the Electro-chemical Polarity of Gases. 8vo. 18 pp. 1 plate. (*Phil. Mag. Suppl.* vol. iv. p. 498.) *London*, 1852

† On some anomalous cases of Electrical decomposition. 8vo. 7 pp. (*Phil. Mag. for March*, 1853.) *London*, 1853

† On the Electricity of the Blow-pipe flame. 8vo. 4 pp. (*Phil. Mag. for January*, 1854.) *London*, 1854

† Experiments on Voltaic reaction. 8vo. 4 pp. (*Phil. Mag.*) *London*

(*Vide also* Matteucci and Grove.)

Grummuth. On Electric Light in vacuo. (*In Danzig Memoirs*, i. 417.)

Grundig, Christoph Gottlob. *Born September 5*, 1707, *at Grosdorfhayn, near Freiberg; died August* 9, 1780, *at Freiberg.*

Neue Versuche nützlicher sammlungen. . . 48 Thle. od 4 Bd. 8vo. *Schneiberg*, 1748-64

Archiv der Mathematik und Physik mit besonderer Rücksicht auf das Bedürfniss der Lehrer herausg. Vol. i. to xxv. 8vo. (*From Dulau, Germ. Cat.* 1864, p. 1. Poggendorff (i. 966 says): "Bis jetzt 29 Thle. 8vo. Greifswalde 1841-57.") *Greifswalde*, 1841-55

Grynæus, Simon Jun. Commentarii duo: De ignitis meteoris unus; alter, De cometarum, causis, &c. . . *Basil*, 1580

† Guadagni, G. Dissertazioni due sopra le Aurore boreali. 12mo. 104 pp. 1 plate. (*Calogera Raccolta*, vol. xxx. p. 1.) *Venezia*, 1744

Gualandris, Angelo. *Born* 1760, *at Padua; died December* 13, 1788, *at Mantua.*

† Narrazione epistolare . . del Turbine avvenuto nel Mantovano . . il 9 d'Agosto 1785. (Data) Mantova, 29 Agosto 1785. 4to. 19 pp. *Mantova*, 1787

† Guarini, G. (Conte). Dell' elettricità naturale. Risponderà il Sig. Conte Gior. Guarini. 4to. 23 pp. *Modena*, 1779

† **Guazzi**, A. Transunto del Ragguaglio d'un Fulmine caduto presso Casalmaggiore con danno di tre persone. 4to. 3 pp. (*Opusc. Scelt.* xiv. 301.) *Milano*, 1791

Gube, F. Die Ergebnisse der Verdunstung und des Niederschlages nach Messungen an neuen, zum Theil registrirenden Instrumenten auf der königl. meteorologischen Station Zechen bei Guhraw. Mit einem Vorworte von (H.) Dove. 8vo. 51 pp. 4 plates. *Berlin*, 1864

Guden, Philipp Peter. *Born* 1722, *at Bockenem, near Hildesheim; died March* 7, 1794, *at Münden.*

† Von der Sicherheit wider die Donner stralen. 8vo. 200 pp. *Göttingen*, 1774

† **Guebhard**, A. De la Lumière électrique. 32mo. 51 pp. *Saint-Germain*, 1867

Guéneau de Montbéliard, P. *Born April* 2, 1720, *at Semur Auxois; died Nov.* 28, 1785, *at Semur.*

Sur les Paragrêles. 8vo. (*Mém. de l'Acad. de Dijon*, viii. 1776, 14 Novembre.) *Dijon*, 1776

Guereo. Compte Rendu, 2e Série, 1819. 8vo. *Lyon*, 1819

Guericke, Otto von. *Born Nov.* 20, 1602, *at Magdeburg; died May* 11, 1686, *at Hamburg.*

Prodromo . . Invenzioni nuove . . del P. Franc. Lana. Fol. *Brescia*, 1670

† Experimenta nova (ut vocantur) Magdeburgica de vacuo spatio, primum a R. P. Gasp. Schotto . . nunc vero ab ipso auctore perfectius editur variisque aliis experimentis aucta . . . Folio. 244 pp. numbered. Portrait, and 20 other plates. (*Electricity*, pp. 147 to 150.) *Amsterdam*, 1672

† Dies F. Otto v. Guericke u. sein Verdienst. 8vo. 54 pp. *Magdeburg*, 1862

Guerin, R. T. Phénomènes Electro-dynamiques. Action mutuelle des fils conducteurs de courants électriques. Thèse soutenue . . Nov. 1828. 8vo. 44 pp. 1 plate. *Paris*, 1828

Guettard, Jean Etienne. *Born Sept.* 22, 1715, *at Etampes; died Jan.* 8, 1786, *at Paris.*

Sur une manière " d'imprégner le fer de sel, de façon que le fer reste attirable par l'Aimant."

† **Gueyton**, A. L'art de la Galvanoplastie à l'usage de MM. les Orfèvres, Bijoutiers et Bronziers. 8vo. 34 pp. *Paris*, 1855

Guidotti. (*Vide* Sgagnoni and Guidotti.)

Guidotti, G. B. Memoria fisico-chimica sulle pietre cadute. 8vo. *Parma*, 1808 ?

† **Guillemin**, C. M. Thèse. Propagation des courants dans les fils télégraphiques. 4to. 66 pp. 1 plate. *Paris*, 1860

Recherches expérimentales sur l'induction Volta électrique. 4to. 69 pp. *Montpellier*, 1861

† Recherches expérimentales sur la transmission des Signaux télégraphiques. 47 pp. 1 plate. *Paris*, 1863

† **Guillemin** et **Burnouf.** Mémoire sur la propagation des Courants élects. Résumé des expériences faites à Nancy du 23 Sep. au 16 Oct. 1859. 8vo. 16 pp. 1 plate. (*Extrait des Mémoires de l'Acad. de Stanislas.*) *Nancy*, 1860 ?

† **Guisan**, F. S. De gymnoto electrico. Commentatio. 4to. 1 plate, 34 pp. *Tubingen*, 1819

† **Guitard**, M. T. Histoire de l'Elécticité médicale. 8vo. 396 pp. 6 plates. *Paris and Toulouse*, 1854

† **Guitard**, T. Précis d'electrothérapie médico-chirurgicale. 12mo. 324 pp. *Paris*

Gull, W. On the value of Electricity as a remedial agent. (*Guy's Hospital Reports*, ii. Ser. viii. 80, part i.) *London*, 1852

† **Gundolf.** Der elektro-magnetische Telegraph. Aus den physikalischen Grundlehren allgemein fasslich dargestellt. 8vo. 33 pp. 1plate. *Paderborn*, 1851

Günther. Etwas vom Elektrophor. 8vo. (*Abhandl. d. Hallischen Naturforsch Gesellsch.* Bd. i. p. 63.) *Dessau u. Leipzig*, 1783

† Günther, J. J. Die Atmosphäre und ihre vorzüglichen Erscheinungen, nach den Grundsäzen der neuern Meteorologie, nach eigenen und Anderer Beobachtungen bearbeitet. 8vo. 253 pp. 1 plate. *Frankfurt*, 1835

Gurney, Goldsworthy. A Series of Lectures upon the Elements of Chemical Science, comprising the basis of the new theory of Crystallization, and diagrams to illustrate the elementary combinations of Atoms, particular theories of Electrical influence and of Flame . . description of his Blow-pipe, &c., &c. 8vo. (*Phil. Mag.* lxii. 301.) *London*, 1823

† Gustavson, Col., Ex-King of Sweden. Reflexions upon the Phenomenon of the Aurora-Borealis, and its relation with the Diurnal Movement. (*Phil. Mag.* lviii. 312.) *Frankfort*, 1821

† Gutle, J. C. Beschreibung verschiedener Elektrisir-maschinen zum Gebrauch fur Schulen. 8vo. 312 pp. 12 plates. *Leipzig u. Nürnberg*, 1790

Beschreibung eines math. physikal Maschinen und Instrumenten Kabinet . . 1st Stuck. 8vo. *Leipzig u. Nürnberg*, 1794

Ditto, 2nd stuck. *Leipzig u. Nürnberg*, 1790

Beschreibung des grossen elektrisch. Zauberspiegels. *Nürnberg*, 1792

Beschreibung verschiedener Elektrisir maschinen. 8vo. *Nürnberg*, 1794

*† Zaubermechanik od. Beschreibung mechanischer Zauberbelustigungen. 8vo., 40 plates. *Nürnberg*, 1794

Kleine Electricitätslehre. *Nürnberg*, 1798

† Lehrbuch der praktischen Blitzableitungskunst. . ols Fortsetzung der "Theoretischen Blitzableitungslehre." 8vo. 446 pp. 16 plates. *Nürnberg*, 1804

Algemeine Sicherheitsregeln für Jederman bey Gewitter. 8vo. *Nürnberg*, 1805

† Fasslicher Unterricht wie man sich bei Gewittern vor den . Wirkungen des Blitzes ohne Blitzableiter sicher . . verwahren Kann. 8vo. 140 pp. *Nürnberg*, 1805

Beschreibung verschiedener Elektrisirmaschinen. 3 Thl. (*Der 1te und 2te hat also den Titel-Beschreibung eines mathematischer physikalischen Instrumenten-Kabinets, &c. d. 3te Beschreibung electrischer Instrumente.*) 8vo. *Nürnberg*, 1806

† Lehrbegriffe fur den gemeinen Mann über Elektricität und Blitzableitung. 8vo. 67 pp. *Nürnberg*, 1811

Beschreib. u. Abbild. e. neu eingericht. sehr wirksamen elektr. einfachen Glasscheibenmaschine, z. Hervorbringung, beider Elektricitäten. 8vo. 1 plate. *Nürnberg*, 1811

† Neue Erfahrungen über die beste Art Blitzableiter anzulegen. 8vo. *Nürnberg*, 1812

Neue wissenschaftliche Erfahrungen, Entdeckungen und Verbasserungen, &c. . 8vo. 272 pp. 4 plates. *München*, 1826

† Gutle und Luz. Unterricht vom Blitz und den Blitz-und-Wetter Ableitern, zur Belehrung und Bernhigung sonderlich der ungelehrten, und des gemeiner. Mannes von F. Luz neu bearbeitet von J. K. Guthe. Erster theil. 8vo. 222 pp. 1 plate. *Nürnberg*, 1804

Gutzmann, F. Über den Steinregen. 4to. *Wien*, 1803

Guyot, A. Tables meteorological and physical. *Washington*, 1858

(*Vide* also Smithsonian Institution.)

† Guyot, J. De la Télégraphie de jour et de nuit. 8vo. 214 pp. 3 plates. *Paris*, 1840

Guyton. Effets présumés du galvanisme dans le règne minéral. 1862

H.

H., J. (*Vide* Anon. Meteorolog. Phen. various.) 1818

Haarlem Hollandsche Maatschappij, der Weetenschappen. Naturkundige Verhandelingen van het. . .

(*Note.—Muncke says* 1775 *to* 1817, 8 vols. *Royal Society Cat. says* 2 vols. 1775, *and* 41 vols. 1769-93, *also* vols. xiii. *and* xxiii. 1824-36.)

Haaxman. (*Vide* Vliet.)

† **Hachette,** Jean Nicolas Pierre. *Born May 6th,* 1769, *at Mézières; died January 16th,* 1834, *at Paris.*

Sur le Galvanisme. (*Journ. de l'Ecole polytechn.* iv. 1802.) *Paris,* 1802

Hachette, J. N. P. Précis des leçons sur le calorique et l'Electricité. 8vo. 80 pp. *Paris,* 1805

Sur les prétendus poles électriques de la terre et sur le prétendu magnétisme des Piles. 8vo. (*Ann. de Chim.* lxv. 1808.) *Paris,* 1808

† Programmes de Physique, ou Précis de Leçons sur les principaux Phénomènes de la Nature. . . 8vo. 248 pp. 6 plates. *Paris,* 1809

Sur la formation des tubes fulminaires. 8vo. (*Ann. de Chim.* xxxvii. 1828.) *Paris,* 1828

De l'action chimique produite par l'induction électrique: décomposition de l'eau. 8vo. (*Ann. de Chim.* li. 1834.) *Paris,* 1834

(*Vide* also Desormes et Hachette.)

Hachette et Thenard. De l'inflammation des métaux par la pile galvanique. 4to. (*From Sue,* ii. 345.) *Paris,* 1801

† **Hachette et Ampère,** Sur les expériences électro-magnétiques de MM. Oersted et Ampère. 4to. 8 pp. (*Journal de Phys., Septembre* 1820.) *Paris,* 1820

Hacker, P. W. Zur Theorie des Magnetismus. *Nürnberg,* 1856

Über das Gesetz des Magnetismus, wie er sich bei der Tragkraft hufeisenförmiger Magnete und bei der Schwingungsdauer geradlieniger Magnete zu erkennen gibt (*Abhandl. d. naturw. Gesellsch. zu Nürnberg,* i. 51-80 *und* 135-142.) *Nürnberg.*

† **Hackwitz.** "Unter den seit dem Jahre 1840 errichteten Werkstatten fur Galvanoplastik dürfte die in Berlin unter der Leitung des Herrn v. Hackwitz bestihende zuerst genannt werden." (*From Martin,* 1856, p. 13.)

† **Hädenkamp.** Über die Wirkung des durch eine Drathspirale gehenden elektrischen Stroms auf eine in der Spirale befindliche weiche Eisenmasse 1852-54. (*Crelles. Journ.* xliv. 1852.) 1852

Haen, A. de. Ratio medendi in nosocomio pract. (i. 234, 199). 15 vols. 8vo. (From Krunitz, p. 177.) *Vienna,* 1757

† **Haedenkamp.** Über d. Gezetze d. Erscheinungen d. Lichts in Krystallschen Körpern. 4to. *Hann,* 1846

† **Haeser.** De radiis lucis violacei vi magnetica commentatio. 4to. 26 pp. *Jenæ,* 1832

† **Hagemann,** H. Eudiometriæ histor., qua describuntur et comparantur præcipui apparatus et modi examinandi aeris atmosphærici titulum Oxygenicum. 4to. 4 plates. *Groen.* 1829

† **Hager,** G. Memoria sulla Bussola orientale Letta all' Università di Pavia. 31 pp. Plates. *Pavia,* 1809

† **Haggren.** Memoria sui fiori lampeggianti, tratta dallo Svezzese (da Soave). 4to. 2 pp. (*Opusc. Scelti,* xii. 141.) *Milano,* 1789

Hahn, Friedrich von. *Born in* 1741, *at Landgut, Neuhaus, Holstein; died October* 9, 1805, *at Remplin, near Malchin.* (*Poggendorff*, i. 994.)

Bemerkungen über die Neigungs-Nadel. 4to. (*Schriften der Berliner Gesellsch. Naturf. Freunde*, x. (*Beobacht.* iv.) p. 355.) *Berlin*, 1792

Bemerkungen über die Entstehung der Feuer Kugeln. 4to. (*Neue Schriften der Gesellsch. Naturf. Freunde*, ii. 222.) *Berlin*, 1799

Preface to Schilling's "De Lepra commentationes." (*Vide Schilling, G. W. and Hahn.*)

† **Hahnreider**, E. A. Bestimmung d. absolut. Intensität d. magnetischen Erdkraft. 4to. 12 pp. 1 plate. *Meseritz*, 1844

† **Haidinger**, W. Ritter Von. Niedrigste Höhen von Gewitter wolken (Zwei Fälle in Erinnerung gebracht). 8vo. 10 pp. (*Aus den Sitzungsberichten* 1852, *der k. Akad. der Wissenschaften abgedruckt.* Vol. ix. ii. Heft.) *Wien*, 1853

Serpentin mit magnetischer Polarität. (*Jahrb. der geologischen Reichsanstalt*, 1857, s. 806.) *Wien*, 1857

Das Meteoreisen von Sarepta. 8vo. 12 pp. 2 plates. (*Aus den Sitzungsberichten der kais. Akad. der Wissenschaften.*) *Wien*, 1862

† Herrn Director Julius Schmidt's Feuermeteor vom 18 October 1863. 8vo. 2 pp. (*Sitzungsb. d. k. Akad. d. Wiss. Wien*, 1863, xlviii. p. 559.) *Wien*, 1863

† Ein Meteor des 10 August, 1863 (vorgelegt 8 Oct. 1863). 8vo. 2 pp. (*Sitzungsb. d. k. Akad. d. Wiss. Wien*, 1863, xlviii. iii. Heft, p. 309.) *Wien*, 1863

† Das Carleton-Tucson-Meteoreisen in k. k. Hof-Mineralien-Cabinete (vorgelegt 8 Oct. 1863). 8vo. 8 pp. 1 plate. (*Sitzungsb. d. k. Akad. d. Wiss. Wien*, 1863, xlviii. iii. Heft, p. 301.) *Wien*, 1863

† Parnallee. Dritter Bericht. (Der Meteorsteinfall von Parnallee bei Madura in Hindostan). 8vo. 9 pp. (*Sitzungsb. d. k. Akad. d. Wiss. Wien*, 1863, xlvii. 420.) *Wien*, 1863

† Der Meteorstein von Tourinnes-la-Grosse, bei Tirlemont im k. k. Hof-Mineralien-Cabinete. 8vo. 5 pp. (*Sitzungsb. d. k. Akad. d. Wiss. Wien*, 1864, xlix. i. Heft. p. 123.) *Wien*, 1864

† Sternschnuppen, Feuerkugeln und Meteoritenschwärme ein Zusammenhange betrachtet. 8vo. 11 pp. (*Sitzungsb. d. k. Akad. d. Wiss.* 1834, *Wien*, xlix. i. Heft, p. 6.) *Wien*, 1864.

† Mittheilungen der Herren Baron Paul Des Granges, seiner Photographien, von Sautorin, und Sternwarte-Directors Julius Schmidt, über Feuermeteore, Meteorsteinfalle, und über die Rillen auf dem Monde, aus Athen. 8vo. 6 pp. (*Sitzb. Wien Akad.*) *Wien*

† Die Meteoriten des k. k. Hof-Mineralien-Cabinets am 1 Juli 1867, und der Fortschritt seit 7 Jänner 1859. 8vo. 10 pp. (*Sitzb. mathem.-naturw. Cl.* lvi. ii. Abth. *Akad. Wien*, p. 176.) *Wien*

† Der Meteorit von Simonod. 8vo. 4 pp. (*Sitzb. d. mathem. & phys. Cl. Wien Akad.* liv. 127.) *Wien*

† Die Localstunden von 178 Meteoritenfallen. 8vo. 8 pp. *Wien*

Ein Meteorfall bei Trapezunt am 10 December, 1863. 8vo. 5 pp. (*Abdr. aus den Sitzungsberichten der k. Akad. der Wissenschaften.*) *Wien*, 1864

Ein vorhomerischer Fall von zwei Meteoreisenmassen bei Troja. 8vo. 8 pp. (*Abdruck aus den Sitzungsberichten der kaiserl. Akad. der Wissenschaften.*) *Wien*, 1865

Der Meteorit von Turakina, Wellington, Neuseeland. 8vo. 3 pp. (*Abdruck aus den Sitzungsberichten der kaiserl. Akad. der Wissenschaften.*) *Wien*, 1865

† **Haidinger, W. Ritter Von**—*continued.*

Der Meteorsteinfäll am 9 Juni, 1866, bei Knyahinya. (Zweiter Bericht) Vorgelegt. . . am 11 October, 1866. 8vo. 48 pp. 3 plates. (*Sitzb. d. k. Akad. d. Wissensch.* ii. Abth. Octob. Heft, 1866, Bde. liv.) *Wien*, 1866

† Der Meteorsteinfäll am 9 Juni 1866, bei Knyahinya nächst Nagy Berezna im Ungher Comitate. 8vo. (*Aus dem* liv. Bde. *d. Sitzb. d. k. Akad. d. Wissens.* ii. Abth. Juli Heft, Jahrg. 1866.) *Wien*, 1866

† Die Tageszeiten der Meteoritenfälle verglichen. Zweite Reihe. Vorgel. . . 31 Jänner, 1867. 8vo. 10 pp. 1 table. (*Sitzb. d. k. Akad. d. Wissensch.* ii. Abth. Jan. Heft, Jahrg. 1867, Bde. lv.) *Wien*, 1867

† Die Tageszeiten der Meteoritenfälle verglichen. Vorgelegt. . . 17 Jänner, 1867. 8vo. 14 pp. 1 table. (*Sitzungsb. d. k. Akad. d. Wissensch.* ii. Abth. Jahrg. 1867, Bde. lv.) *Wien*, 1867

Der Meteorsteinfäll von Slavetice in Croatien am 22 Mai 1868. Vorläufiger Bericht. 8vo. 7 pp. *Wien.*

† Elektrische Meteore am 20 October, 1868, in Wien beobachtet. 8vo. 9 pp. 1 chromolith. (*Sitzungsb. d. k. Akad. d. Wiss.* lviii. ii. Abth. 1868.) *Wien*, 1868

Der Meteorsteinfäll vom 30 Jan. 1868, unweit Warschau. Nebst einem Anhang in Bezug auf den angeblichen Meteorsteinfall in Baden-Baden. 8vo. 8 pp. (*Aus d. Sitzungsber. d. k. Akad. d. Wissensch.*) *Wien*, 1868

† Der Meteorsteinfäll am 22 Mai 1868, bei Slavetice. *Zweiter* Bericht. Vorgelegt in d. Sitzung. am 3 Dec. 1868. 8vo. 12 pp. 1 plate. (*Sitzb. d. k. Akad. d. Wissensch.* ii. Abth. Heft Jahr. 1868, lviii.) *Wien*, 1868

† Die südwestlichen Blitzkugeln am 20 Octbr. 1868. Nachträge zu der Mittheilg. am 5 Novbr. 8vo. 2 pp. (*Sitzb d. k. Akad. d. Wiss.* Dec. Heft 1868 lviii. Bde.) *Wien*, 1868

† Ein kugelförmiger Blitz am 30 Aug. 1865, gesehen zu Feistritz bei Peggau in Stiermark. 8vo. 4 pp. (*Sitzb. d. k. Akad. d. Wiss.* Dec. Heft, 1868, lviii. Bde.) *Wien*, 1868

† Licht, Wärme und Schall bei Meteoritenfällen. Bemerkungen. 8vo. 50 pp. (*Sitzungsb. d. k. Akad. d. Wiss.* lviii. ii. Abth.) *Wien*, 1869

Der Meteorit von Goalpara in Assam, nebst Bemerkungen über die Rotation der Meteoriten in ihrem Zuge. 8vo. 2 plates. *Wien*, 1869

† Heasle, Rutlam, Assam. 3 neue Meteoriten. Vorläufiger Bericht. 8vo. 7 pp. (*In Sitzungsb. d. k. Akad. d. Wiss.*) *Wien*, 1869

† Bemerkungen zu Herrn Dr. Stanislaus Meunier's Note über den Victorit oder Enstatit von Deesa. Preise für aufzusuchende Meteorsteine aus altbekannten Fällen, von welchen unsere Museen noch nichts besitzen. 8vo. 6 pp. (*Sitzungsb. d. k. Akad. d. Wiss.* Jan. Heft, Bde. lxi. Jan. Heft.) *Wien*, 1870

† Die zwei homerischen Meteoreisenmassen von Troja Nachtrag zu den Mittheilungen über dieselben vom 6 October, 1864. 8vo. 8 pp. (*Sitzb. d. k. Akad. d. Wissensch.* ii. Abth. Jan. Heft 1870, lxi. Bde.) *Wien*, 1870

† Der Ainsa-Tucson-Meteoreisenring in Washington und die Rotation der Meteoriten in ihrem Zuge. 8vo. 16 pp. 1 plate. (*Sitzb. d. k. Akad.* lxi.) *Wien*, 1870

† Herrn Director Julius Schmidt's Beobachtung der Meteore in der Nacht des 13-14 November, 1866. 8vo. 4 pp. (*Sitzb. d. mathem.-naturwiss*, Cl liv. p. 771.) *Wien*

† **Hajech.** Sul telegrafo stampante ideato dal C. Mezzanotte. 4to. 1 p. (*Atti dell' I. R. Istit. Lomb.* ii. 102.) *Milano*, 1860

Haldat du Lys, Charles Nicolas A. de. *Born December 24, 1770, at Bourmont, Lorraine; died November 26, 1852, at Nancy.*

Recherches sur l'incoercibilité du fluide magnétique. (*Mém. de l'Acad. de Nancy*, 1830.) *Nancy*, 1830

Haldat du Lys, Charles Nicolas A. de.—*continued.*

Extraits du Précis des travaux de la Société Royale des Sciences . . . de Nancy pendant les an. 1829 à 1832; publiés en 1833. Articles de M. le Dr. de Haldat, Sec. de cette Académie. 8vo. 18 pp. *Nancy*, 1833

Notice sur la vitesse avec laquelle s'exerce l'influence magnétique. (*Mém. de l'Acad. de Nancy*, 1838.) *Nancy*, 1833

1. Note sur la condens. de la force magnét. vers les surfaces des Aimants.
2. Expér. nouvelles sur le Magnét. par Rotation. Lettre à M. Arago.
3. Observ. d'une Couronne autour de la Lune.

8vo. (*These three works compose a brochure of* 16 pp.) *Nancy*, 1838

† Recherches sur quelques phénomènes du magnétisme, le fantôme magnétique, et sur la diffraction complexe. 8vo. 45 pp. (*Ext. des Mém. de la Soc. Royale . . . de Nancy pour* 1839.) *Nancy*, 1840

Recherches sur la généralité du magnétisme, ou complément des expériences de Coulomb sur le même sujet. (*Mém. de Nancy*, 1841.) *Nancy*, 1841

† Recherches sur la puissance motrice et l'intensité des courants de l'Elect. dynamique. 8vo. 54 pp. *Lyon*, 1842

Sur la force coercitive de la polarité des aimants sans cohésion. (*Mém. de l'Acad. de Nancy*, 1845.) *Nancy*, 1845

† Hist. du Magnétisme dont les phénomènes sont rendus sensibles par le mouvement. 8vo. 49 pp. 1 plate. *Nancy*, 1845

† Deux mém. sur le Magnétisme. 8vo. 40 pp. 1 plate. (*These are* (1) *Recherches sur l'Universalité de la Force magnétique*, p. 3; (2) *Recherches sur l'application de la Force magnétique*, p. 33.) *Nancy*, 1846

† Essai historique sur le magnétisme et l'universalité de son influence dans la nature. 1st edition. 8vo. 21 pp. *Nancy*, 1849

† Essai historique sur le Magnétisme et l'universalité de son influence dans la nature. 2de ed. revisée et corrigée. 8vo. 29 pp. *Nancy*, 1850

† Note sur le fantôme magnétique. 8vo. 12 pp. (*Ext. des Mém. de la Société . . . de Nancy.*) *Nancy*, 1850

† Exposition de la doctrine magnétique, ou Traité philosophique, historique, et critique du magnétisme. 8vo. 320 pp. 4 plates. *Nancy & Paris*, 1852

† Nouvelles recherches sur l'attraction magnétique . . . à l'appui d'un mém. sur l'universalité du Magnétisme. 8vo. 19 pp. (*Ext. Soc. Royale de Nancy.*) *Nancy*

† Recherches sur la cause du Magnétisme par Rotation, and (at p. 12) Recherches sur la généralité du Magnétisme. 8vo. 53 pp. 1 plate. (*Lamont, Handb. says* 1841.) *Nancy*, 1841

† **Hales, S.** Extract of a letter from Hales, S. to Hall, W. concerning some Electrical Experiments. Read June 30, 1748. 4to. 3 pp. (*Phil. Trans.* xlv. 409.) *London*, 1748

Some considerations on the causes of Earthquakes. 4to. (*Phil. Trans.* 1750.) *London*, 1850

Hall. Ephemerides. An. 1777. Appendix aurorae theoria. 8vo. *Vindoboni*, 1777

Dissertatio de Electricitate. (*From Manduit*, p. 111.)

† **Hall, J.** Suggestion for establishing a Telegraphic intercourse between London and Dublin. 8vo. 2 pp. (*Phil. Mag.* xxxiv. 124.) *London*, 1809

† A Meteor of uncommon magnitude and brilliancy seen in the vicinity of Middlebury, United States, on the evening of 17th June. Scientific account of. 8vo. 1 p. (*Phil. Mag.* lii. p. 236.) *London*, 1818

Hall. (*Vide* Palmer and Hall.)

Hall, Marshall. On the condition of Muscular Irritability in the paralytic muscles. (*Med. Chir. Trans.* Ser. ii. t. iv.)

Hallaschka, F. I. C. Dissertatio de phenomenis electro-magneticis, &c.
Pragæ, 1822

Hallé, J. N. Rapport au nom de la commission nommée pour répéter les expériences sur le galvanisme. 4to. (*Soc. Philomath.* an. 1798, p. 131.)
Paris, 1798

Exposition abrégée des principales expériences répétées par M. Volta. (*Bulletin des Sciences de la Soc. Philomathique*, an. 10, No. 58.)

Compte rendu à l'Institut National sur le Galvanisme. *Paris*

("*Rapport fait au nom d'une commission nommée par l'Institut, pour examiner et vérifier les phénomènes galvaniques.*" *This commission was composed of Coulomb, Sabathier, Pelletan, Charles, Foureroy, Vanquelin, Guyton, and Hallé. Venturi of Modena joined it . . . and Humboldt also,* "*pour répéter celles (experimens) qui sont contenues dans l'article* vi. *et qui ont été faites au mois de prairial de l'an.* 6.")

Détail des expériences faites à l'Ecole de Médecine de Paris, sur le Galvanisme. (*Jour. de Médecine de Corvisart, &c. . .* i. Nivose. an. 9, p. 351.) *Paris*, 1801

Les résultats des expériences faites par le Cit. Hallé sur les malades qu'il a traité dans les Cabinets de l'Ecole de Médecine de Paris. (*Jour. de la Soc. Philomatique*, Messidor, an. ix. (1801.) *Paris*, 1801

† Hallencreutz, D. Beobachtung an Gewitterwolken welche Blitze gegen einander geben zu Pello innerhalb des Polarkreises. 8vo. 3 pp. 1 plate. (*K. Schwed. Akad. Abh.* xxxv. 85.) *Leipzig*, 1773

Haller, Albrecht von. *Born October* 16, 1708, *at Bern; died December* 12, 1777, *at Bern.*

Observation sur la sensibilité des nerfs et des tendons. 4to. (*Mém. de Paris*, ann. 1753, *Hist.* p. 136.) *Paris*, 1753

Elementa Phisiologiæ corp. humani. 8 tomi. 4to. (*From Volta.*)
Lausan, 1757-78

Disputationes ad morborum historiam et curationem facientes. (Vol. i. p. 19 *et seq.*) 7 vols. 4to. *Lausan*, 1757-60

Halley, Edmund. *Born October* 29, 1656 (*A. St.*), *at Haggerston, near London; died January* 14, 1724 (*A. St.*), *at Greenwich.*

† Theory of the Variation of the Magnetical Compass. 4to. 14 pp. (*Phil. Trans.* 1683, p. 208.) *London*, 1683

Theoria variationis pixidis magneticæ. (*Opusc. Act. Erudit. Lips.* tom. i. p. 244.)

† Theory of the Variation of the Magnetical Compass. 4to. 12 pp. (*Phil. Trans.* vol. xiii. 1683, p. 208.) *London*, 1683

† An account of the cause of the change of the Variation of the Magnetical Needle; with an hypothesis of the Structure of the internal parts of the Earth. 4to. 16 pp. 1 plate. (*Phil. Trans.* 1693, p. 563.) *London*, 1694

Tabula nautica. Fol. (*From Watt.*) 1700

A General Chart shewing, at one view, the Variation of the Compass, &c. 1701

(*Poggendorff*, i. 1095, *says*: "*Erste Declinations karte, Frucht seiner Reisen von* 1698-1700.")

Sur la déclinaison de l'aimant. 4to. (*Mém. de Paris*, 1701, *Hist.* p. 9.)
Paris, 1701

Sur la déclinaison de l'aimant. 4to. (*Mém. de Paris*, 1706, *Hist.* p. 3.)
Paris, 1706

† Some remarks on the Variations of the Magnetical Compass, published in the Memoirs of the Royal Academy . . . with regard to the general Chart of those Variations made by E. Halley; also concerning the true longitude of the Magellan Straits. 4to. 4 pp. (*Phil. Trans.* 1714, p. 165.)
London, 1714

Halley, Edmund—*continued.*

† An account of several extraordinary Meteors or Lights in the Sky. 4to. 6 pp. (*Phil. Trans.* 1714-15-16, p. 159.) *London*, 1714

A description of the Phenomena of March 6, 1716, as it was seen on the ocean near the coast of Spain; with an account of the return of the same sort of appearance on March 31 and April 1 and 2 following. 4to. (*Phil. Trans.* 1716, p. 430.) *London*, 1716

† An account of the late surprizing appearance of the Lights seen in the air on the 6th March, 1716; with an attempt to explain the principal phenomena thereof. 4to. 23 pp. 2 plates. (*Phil. Trans.* 1716, p. 406, T. p. xxix. for 1714-15-16.) *London*, 1717

† An account of the extraordinary Meteor seen all over England on the 19th March 1719, with a demonstration of the uncommon height thereof. 4to. 13 pp. (*Phil. Trans.* 1719, p. 978.) *London*, 1719

An account of the phenomena of a very extraordinary Aurora Borealis, seen at London on November 10, 1719, both morning and evening. (*Phil. Trans.* 1719, p. 1099.) *London*, 1719

Observation sur les coups de Tonnerre multipliés et extraordinaires. 4to. (*Mém. de Paris*, 1731, *Hist.* p. 19.) *Paris*, 1731

Tabulæ nauticæ variationes magneticas denotantes. With an account of the Improvements made therein by W. Mountain. Fol. (*From Watt.*) *London*, 1758

Hallstrom, Gustav Gabriel. *Born November 25, 1775, at Ilmola-Socken, Wasa-Län; died June 2, 1844, at Helsingfors.*

Dissertatio de variationibus declinationis magneticæ diurnis; et animadversiones circa hypotheses ad explicandas variationes diurnas excogitatas. *Abo*, 1803

† De apparitionibus Auroræ borealis, in septentrionalibus Europæ partibus. 4to. 14 pp. (*Pogg. says In Act. Soc. Scient.* Fenn. ii. 1847.)

Hamberger, Georg Erhard. *Born December 21, 1697, at Jena; died July 22, 1755, at Jena.*

De partialitate aeus magneticæ. 4to. (*From Lamont, Handb.* p. 435.) *Jena*, 1727

Elementa physices methodo mathem. . . . conscritta . . . cap. x. 3 Ausg. 576 in scholiam. 8vo. (*From Krunitz*, p. 154, *and from Waitz.*) *Jena*, 1761

Gralath's account of Hamberger's experiment on the Attraction of Bodies by the Barometer tube and mercury. (*Dansig Mém.* ii. 426.)

Hamburgisches Magazin . . . oder gesammelte Schriften zum Unterricht und Vergnugen. 28 vols. 8vo. *Hamburg*, 1746-63

Neues Hamb. Magazin oder Fortsetzung gesammelter Schriften. 20 vols. *Hamburg*, 1767-84

Hamel. (*Vide* Duhamel, J. B.)

Hamel, T. The Life, or some account, of Schilling von Canstadt, in which Schilling's Electric Telegraph and mining apparatus for exploding are mentioned. 4to. (*Bull. Acad. Petersb.* ii. 1860.) *Petersburg*, 1860

Die Entstehung der galvanischen und elektromagnetischen Telegraphie. 8vo. (*Mélanges physiques et chim. tirés du Bulletin de l'Acad. de St. Pétersbourg*, iv. *Livraison* 2 *ou* 3, pp. 227—284.) *St. Pétersbourg*, 1860

† Hamel and Cooke. Historical account of the introduction of the Galvanic and Electro-magnetic Telegraph into England by Dr. Hamel; read before and reprinted by the Society of Arts, with comments thereon by Wm. F. Cooke. 12mo. 79 and xvi. pp. 1 cut. *London*, 1859

Hamilton, Hugh. *Born March* 26, 1729, *at Grafsch, Dublin; died Dec.* 1, 1805, *at Ossory.*

Phil. essays . . observations, &c. on the Aurora, &c. 12mo. *London*, 1767

† Osservazioni e congetture sopra la natura dell' Aurora boreale e le code delle Comete. 12mo. 59 pp. (*Scelta d'Opuscoli*, xxxi. 3.) *Milano*, 1776

† Hamilton, W. Particulars respecting Hail-storms in the West Indies. 8vo. 3 pp. (*Phil. Mag.* xliv. 191.) *London*, 1814

Hammer, H. G. Die Electricität als fortlaufend bildende und erhaltende Kraft, von ihrem atomistischen Ursprung bis zur vollständigen Ausbildung der Organe. 8vo. 144 pp. *Dresden*, 1855

Hanaw. Nachricht aus St. Petersburg.

(*Note.—Poggendorff* (ii. 634) *has under the head* "*Richman*," *H.* (*Hanov.*) "*Nachricht aus St. Petersburg vom* 3 *Aug. von dem . . Todesfall d. H. Prof. Richmann mit phys. Anmerk. begleitet.*" *Frankfurt gelehrt Zeitung*, 1753.)

Erlauterte Merkwürdigkeiten. (*From Van Swinden*, i. 416. *Refers to magnet* p. 364.)

Hanke, J. Horologium nocturnum magneticum, &c. (*From Pogg.* i. 1011.) *Olomuc.* 1683

† Hankel, Die Gesetze der Krystallelektricität. 4to. 28 pp. *Halle*, 1840

Hankel, H. Über die Construction eines Electrometers. Messungen d. Anziehung zwischen einem Eisenkern und eine ihn umgebende elektrische Spirale. *Leipzig*, 1851

Hankel, Wilhelm Gottlieb. *Born May* 17, 1814, *at Ermsleben Reg. Bez. Merseburg.*

† De thermo electricitate crystallorum. 8vo. 32 pp. 1 plate. *Halle*, 1839

Many articles on Electricity, Magnetism, &c. in Poggendorff's Annalen, vols. xix. (1840) to ciii. (1858). (*Pogg.* i. 1011.)

† Über die Magnetisirung von Stahlnadeln durch den elektrischen Funken und den Nebenstrom desselben. 4to. 28 pp. *Halle*, 1845

† Grundriss der Physik. 8vo. 327 pp. *Stuttgart*, 1848

† Mittheilung einiger Versuche üb. d. Elektricität der Flamme u. die hierdurch erzeugten elektrischen Ströme. 4to. 15 pp. (*Poggendorff*, Ann. lxxxi. (1850). *Leipzig*, 1850

† Messungen d. Abstossung d. krystall Wismuths durch d. Pole eines Magnets mittelst. d. Drehwage. 8vo. 20 pp. (*König. Sässische Gesellsch. d. Wissen.*) *Leipzig*, 1851

† Elektrische Untersuchungen. Erste Abhandlung über die Messung der atmosphärischen Elektricität, nach absoluten Maassen. 4to. 219 pp. 2 plates. (*König. Sächsische Gesellschaft der Wissensch.* vol. v.) *Leipzig*, 1856

† Elektrische Untersuchungen Zweite Abhand. Über die thermoelektrischen Eigenschaften des Boracites. 4to. 101 pp. (*König. Sächische Gesells. der Wissensch.* vol. vi.) *Leipzig*, 1857

† Elektrische Untersuchungen Dritte Abhandl. Über Electricitäts erregung zwichen Metallen und erhitzten Salzen. 4to. (*König. Sächische Gesells. der Wissen.* vol. vi.) *Leipzig*, 1858

† Electrische Untersuchungen Vierte Abhandl. Über das Verhalten der Weingeist-flamme in elektrischen Beziehung. 4to. 79 pp. (*König. Sächische Gesells. d. Wissen.* vol. vi.) *Leipzig*, 1859

† Electrische Untersuchungen Fünfte Abhandl. Maassbestimmungen der elektromotorischen Kraft. Erster Theil. 4to. 52 pp. (*König. Sächische Gesells. d. Wissen.* vol. ix.) *Leipzig*, 1861

† Elektrische Untersuchungen. Abhandl. vi. Maassbestimmungen der elektromotorischen Krafte. Part ii. 4to. 106 pp. (*König. Sachischen Gesells. d. Wissen.* vol. xi.) *Leipzig*, 1867

Hankel, Wilhelm Gottlieb—*continued*

Neue Theorie der elektr. Erscheinungen (2 Abhandl.) 8vo. **1865**

† Elektrische Untersuchungen, Abhandl. vii. Über die thermoelektrischen Eigenschaften des Bergkrystalles. 4to. 70 pp. 2 plates. (*Abhandl. d. K. S. Gesells. d. Wissen.* xiii. *Leipzig.*) *Leipzig*, **1866**

† Elektrische Untersuchungen, Abhandlung viii. Uber die thermoelektrischen Eigenschaften des Topases. 4to. 96 pp. 4 plates (coloured). (*Abhandl. d. mathem. phys. Classe d. K. Sächsische Gesells. d. Wissen.* ix. *Bandes.* (No. iv.) *Leipzig*, **1870**

† Elektrische Untersuchungen Neunte Abhandlung. Über die thermoelektrischen Eigenschaften des Schwerspathes. 69 pp. 8vo. (*Abhandl. d. Mathem. phys. Classe d. K. Sächischen Gesells. d. Wissenschaft*, vol. x. No. iv.) *Leipzig*, **1872**
(*Note.—There are two title-pages; one of them without the designation of the Royal Saxon Society, by which it was printed.*)

† Elektrische Untersuchungen Zehnte Abhandlung. Über die Thermoelektrischen Eigenschaften des Aragonites. 70 pp. 3 plates. (*Abhandlung. d. K. Sächsischen Gesells. d. Wissenschaft*, No. 5, vol. x.) *Leipzig*, **1872**

† **Hänle**, C. F. Die Ursache der innern Erdwärme der Entstehung des Erdplaneten, der Feuerkugeln, Sternschnupfen und Meteorsteine. 8vo. 78 pp. *Lahr*, **1851**

† Galvano-Epikalymmatik oder hydroelektrische Metallüberziehung Vergoldung, Versilberung, &c. auf galvanischem Wege. Nebt dem Neuesten . . über Galvanoplastik, &c. . . 2te sehr vermehrte Auflage. *Lahr*, **1857**

Hannemann, J. L. De fulminis effectu miro. (*Miscell. Acad. Nat. Cur.*) **1685**

De pisce torpedine ejusque proprietatibus admirandis. (*From Pogg.* i. 1012.)

Hanover. Hannoversche gelehrte Anzeigen-nütsliche Sammlungen, Beiträge und Hannoversches Magazin seit 1750 nach einander in 4to. herausgegeben. (*From Reimarus Vom Blitz*, 1778, p. xliii.)

Hanover Magazin. (Contains many articles on Thunder, Lightning, &c. in 1781, 1782, &c.)

† **Hanow**, M. C. Verschiedene neue Versuche mit den gläsernen Spring-Kölbchen 4to. 10 pp. 1 plate. (*Versuche d. Naturf. Gesellsch. in Dansig*, i. 534.) *Dansig*, **1747**

† Erlauterte Ursachen der Versuche mit den Spring-Kölbchen. 4to. 69 pp. (*Versuche d. Naturf. Gesellsch. in Danzig*, iii. 328.) *Dansig*, **1756**

Hansteen, Christopher. *Born Sept.* 26, 1784, *at Christiania.*

† Untersuchungen über den Magnetismus der Erde, übersetzt von P. F. Hanson. Erster Theil. Die mechanischen Erscheinungen des Magneten mit Anhang enthalt. Beobachtungen der Abweichung und Neigung der Magnetnadel. 4to. 502 and 148 pp. 5 plates, atlas 7 plates. *Christiania*, **1819**

† Ueber die tägliche Veränderung der Intensität des Erd-Magnetismus, und den Magnetismus vertikalstehender Körper. Vorgel. im Marz, 1821. *Christiania*, **1821**

† Observations on Magnetism. 8vo. 4 pp. (*Phil. Mag.* lix. 248.) *London*, **1822**

About 11 articles in the "Mag. for Naturvidenskaberne" edited by him in conjunction with Lundh and Maschmann (1823 to 1853); also about 6 in "Schweigger's Journal," 1813 to 1827, and about 10 in Poggendorff's "Annals" (1825 to 1855.)

† On the Polar lights, or Aurorae Boreales and Australes. 8vo. 11 pp. 1 plate. (*Phil. Mag. or Annals*, ii. 334.) *London*, **1827**

† Periodisk forandring i Jordens magnetiske Intensitet, som er afhængig af Maanebanens Beliggenhed. 8vo. 34 pp. (*Nyt Magasin for Naturvidenskaberne*, ii.) *Christiania*, **1839**

Hansteen, Christopher—*continued.*

† Magnetiske Jagttageleser, anstillende paar et Togt i Middelhavet med den Norske Corvet Ornen i Sommeren 1840, af Capne. Konow og Valeur; middeelte af Chr. Hansteen. 8vo. 26 pp. (*Nyt Mag. for Naturvidenskaberne*, vol. iii.) *Christiania*, 1841

† Magnetiske Jagttageleser paar en Reise igjennem Danmark og en Deel af det nordlige Tydskland i Sommeren 1839. 8vo. 43 pp. 1 plate (curves). (*Nyt Mag. for Naturvidenskabene*, vol. iii. p. 227.) *Christiania*, 1842

† Bidrag til Bestimmelsen af forskjellige Constanter for Christiania. 8vo. 84 pp. 2 plates. (*Nyt Mag. for Naturvidenskabene*, vol. iii.) *Christiania*, 1842

† Disquisitiones de mutationibus quas patitur momentum acus magneticæ. 4to. 44 pp. 1 plate. *Christiania*, 1842

† Bidrag til Bestemmelsen af forskjellige Constanter. (*Fortsat fra 3 die Bds. første Hefte* 584.) 8vo. 21 pp. (*Nyt Mag. for Naturvidenskabene*, vol. iii.) *Christiania*, 1842

† Magnetiska Terminsiagttageleser i Christianias magnetiska Observatorium, middeelte af C. H. 8vo. 11 pp. (*Nyt Mag. for Naturvidenskabene.*) *Christiania*, 1842

† Magnetiska Jagttageleser anstiblede paa et Ovelsestogt med den Norske Corvet Ornen til Lissabon og de Azoreske oer i Sommeren 1841, af Expeditionens Officierer, middeelte af C. H. 8vo. 5 pp. (*Nyt Mag. for Naturvidenskabene*, vol. iii.) *Christiania*, 1842

† Minimum af Magnetnaalens Inclination i Christiania. (*Tillæg til Undersøgelsen* S. 273-282.) 8vo. 3 pp (*Nyt Mag. for Naturvidenskabene*, vol. iii.) 8vo. 3 pp. *Christiania*, 1842

Interpolations formula for Magnetnaalens Misvisw. og Helding, &c. 4to. *Christiania*, 1844 ?

† Magnetiske Jagttageleser anstillede paa forskjellige Söereiser i Atlanterhavet og Middelhavet af den Norske Marines Officerer, samt paa en Reise til Stockholm; meddelta af C. H. 8vo. 15 pp. (*Nyt Mag. Naturvidenskabene*, vol. iv.) *Christiania*, 1845

† Meteorologiske Constanter for Christiania. 4to. 51 pp. and 5 pp. (*Nyt Mag. for Naturvid.* v. 374 und vi. 51 pp.) *Christiania*, 1845-51

† Sur la diminution de l'inclinaison magnétique en Europe. (Lettre adressée le 22 Septembre, 1853, à M. Quételet par M. Hansteen.) 8vo. 18 pp. (*Acad. Rle. de Belgique : Ext. du* v. xx. No. 10, *des Bulletins.*) *Bruxelles*, 1853

† Sur les Aurores Boréales et sur l'inclinaison magnétique à Bruxelles. Lettres de M. Hansteen communiquées par M. A. Quételet, Sec. de l'Acad.) 8vo. 24 pp. (*Extr. du* tom. xxi. No. 5 *des Bulletins.*) *Bruxelles*, 1855

† Den magnetiske Inclinations Forandring i den nordlige tempererte Zone 4to. 71 pp. 1 chart. *Kjobenhavn*, 1855

† Den magnetiske Inclinations Forandringer i den nordlige og sydlige Halvkugle 4to. 46 pp. (*Fortsaettelse af Afhandlingen i Kgl. Danske Videnskabernes Selskabs Skriæfter femte Rkke, 4de Bands, 1ste Hefte*, 1856, s. 99—167.) *Kjobenhaven*, 1857

† Den magnetiske Inclinations periodiske Forandringer. Till K. vet. Akad. inlemnad d. 3 Mars, 1857. 4to. 22 pp. 1 plate. (*K. Vet. Akad. Handl.* ii. No. 2.) *Kjobenhavn*, 1857

† Physikalske Meddelelser ved. A. Arndtsen, Efter Foranstaltning af det akademiske Collegium, udgivne af Chr. Hansteen. Universitäts-Program for 2det Semester, 1858. 4to. 75 pp. 2 pl. *Christiania*, 1858

† Das magnetische System der Erde. 8vo. 4 plates. 36 pp. (*Zeitschr. f. pop. Mitth.* i. 33.) *Altona*, 1859 ?

† Sur les Aurores Boréales et sur l'inclinaison Magnétique à Bruxelles; Lettres de M. Hansteen communiquées par M. A. Quetelet. 8vo. 24 pp. (*Acad. Royale de Belgique. Extr. du* tom. xxi. No. 5 *des Bulletins.*) *Bruxelles*

† Jordmagnetiske iattagagelser. 4to. 8 pp. *Upsala*, 1866

† **Hansteen und Due.** Resultate magnetischer astronomischer und meteorologischer Beobachtungen, auf einer Reise nach dem östlichen Sibirien in den Jahren 1828-30. Anhang . . Beobacht . . 4to. 189 pp. *Christiania*, 1863

† **Hansteen,** C. und **Fearnley,** C. Die Universitäts-Sternwarte in Christiania. 4to. 3 plates. *Christiania*, 1849

Happach, Lr. H. F. Gf. Beobacht. u. Erklär. merkwürd Naturerscheinn. 8vo. *Quedlinb.*, 1812

† **Harding.** Observations on the Variations of the Needle. 4to. 11 pp. (*Dublin Acad.* (?) vol. iv.) *Dublin*, 1791

† **Hardy,** C. Description of an improved Telegraph. 8vo. 6 pp. 1 plate. (*Phil. Mag.* xxxiii. 343.) *London*, 1809

Hardy, E. Aperçu sur la Théorie du magnétisme terrestre de M. Pariset. 8vo. 12 pp. *Paris*, 1862

Hare, Robert. *Born January* 17, 1781, *at Philadelphia; died May* 15, 1858, *at Philadelphia.*

A new Theory of Galvanism . . Calorimotor, &c. 8vo. 17 pp. (*From Dove*, p. 185.) *Philadelphia*, 1819

† A new Theory of Galvanism, supported by some Experiments and Observations made by means of the Calorimotor, a new galvanic instrument; also a new mode of decomposing Potash extemporaneously. 8vo. 10 pp. 1 plate. (*Phil. Mag.* liv. 206.) *London*, 1819

† A Memoir on some new modifications of Galvanic apparatus, with Observations in support of his theory of Galvanism. 8vo. 11 pp. 1 plate. (*Phil. Mag.* lvii. 284.) *London*, 1821

† Description of an electrical Plate machine; the plate mounted horizontally, and so as to show both negative and positive Electricity. 8vo. 2 pp. (*Phil. Mag.* lxii. 8.) *London*, 1823

† An Essay on the question, Whether there be two Electrical fluids, according to Du Faye, or one according to Franklin? 8vo. 5 pp. (*Phil. Mag.* lxii. 3.) *London*, 1823

† An Essay on the question whether there be two Electrical fluids or one? Also a description of an Electrical Plate Machine . . &c. 8vo. 10 pp. 1 plate. (*Originally in the Phil. Mag.* lxii. pp. 3 and 8, &c.) 1823

† On the construction and applications of the improved Sliding-rod Eudiometer, and of the Volumescope 8vo. 9 pp. (*Phil. Mag. or Annals.* vi. pp. 114 and 171.) *London*, 1829

† An examination of the question . . (relative to) Mechanical Electricity and the Galvanic fluid. 8vo. 11 pp. *Philadelphia*, 1836

† Experimental observations, &c., with theoretical suggestions respecting the causes of Tornadoes, Falling Stars, and the Aurora Borealis. 4to. 60 pp. 1 plate. *Philadelphia*, 1836

Description of an Electrical machine, with a plate 4 ft. in diameter, so constructed as to be above the operator; also of a Battory discharger employed therewith, and some observations on the causes of the diversity in the length of the Sparks erroneously distinguished by the terms Positive and Negative. 4to. (*Amer. Phil. Soc. Trans.* new series, vol. v.) *Philadelphia*, 1837

Sundry improvements in apparatus or manipulation. 4to. (*Amer. Phil. Soc. Trans.* new series, vol. v.) *Philadelphia*, 1837

On the causes of the Tornado, or Water-spout. 4to. (*Amer. Phil. Soc. Trans.* new series, vol. v.) *Philadelphia*, 1837

† Engraving and description of a Rotatory-multiplier, or one in which one or more needles are made to revolve by a galvanic current. 4to. (*Trans. Amer. Phil. Soc.* new series, vol. vi. p. 343.) *Philadelphia*, 1839

† Improved process for obtaining Potassium. Read Dec. 7, 1838. 4to. 2 pp. (*Trans. Amer. Phil. Soc.* vol. vi. p. 341.) *Philadelphia*, 1839

† Hare, Robert—*continued.*

Engraving and description of an apparatus for the decomposition and recomposition of Water. . . Read Dec. 7, 1838. 4to. 2 pp. (*Trans. Amer. Phil. Soc.* new series, vol. vi. p. 339.) *Philadelphia*, 1839

† Communication faite à la Société Philosophique Américaine . . 1839, au sujet des Trombes, et relativement à un mémoire de M. Peltier, sur la cause de ces Météores, par R. Hare. . . Accompagnée de la traduction d'un mémoire sur les causes des Trombes, publié par le même auteur dans les Trans. de la susdite Société, vol. v. 8vo. 12 pp. *Philadelphia*, 1840

Of the conclusions arrived at by the Committee of the Academy (Paris) agreeably to which Tornadoes are caused by Heat. 8vo. 89 pp. *Philadelphia*, 1852

Of the conclusion arrived at by a Committee of the Academy of Sciences of France, agreeably to which Tornadoes are caused by Heat. 2nd edition. 8vo. *Philadelphia*, 1852

† A Memoir on some new modifications of Galvanic apparatus, with observations in support of his new theory of Galvanism. 8vo. 17 pp. 1 plate. (*n. d.*)

† A letter to Prof. Faraday on certain Theoretical opinions. 8vo. (*Amer. Journal of Science*, No. 1, vol. xxxviii.) *New York?*

Description of an apparatus for deflagrating Carburets, Phosphurets, and Cyanides in vacuo, or in an atmosphere of Hydrogen; with an account of some results obtained by these and other means, especially the isolation of Calcium. 4to. (*Trans. Amer. Phil. Soc.* new series, vol. vii.) *Philadelphia*, 1841

† Hare and Allen. Account of a Tornado which, towards the end of August, 1838, passed over the suburbs of the City of Providence, in the State of Rhode Island, and afterwards over a part of the village of Somerset; also an extract of a letter on the same subject from Z. Allen, Esq., of the City of Providence. 4to. 5 pp. (*Trans. Amer. Phil. Soc.* new series, vol. vi. p. 297.) *Philadelphia*, 1839

Harriot (or Hariot), Thomas. *Born* 1560, *at Oxford; died July* 2, 1621, *at London.*

On Magnetic Variations. (*From Gilbert, and vide Pogg.* i. 1019.)
(*Note.—One of the "Viri docti qui in longinquis navigationibus variationis magneticæ differentias observaverunt."*)

† Harles, C. F. Andeutungen einer pathogisch. Elektrologie und insbesondere einiger vorzugsweise electrischen Krankheiten. 4to. 80 pp. (*Abhandl. der Physik. Medic. Soc. zu Erlangen*, B. i. s. 52.) *Frankfurt*, 1810

Der Republikanismus in der Naturwissenschaft und Medicin auf der Basis, und unter der Aegide, des Electricismus. 8vo. (*From Heinsius*, vi. 335.) *Bonn*, 1819

Harpez de la Force. Proposal of a Prize Essay. (*Danzig Mem.* i. 261.)

Harrington, R. (or Anonymous). A new system of Fire, &c., &c.; also an elucidation, &c. . . Electricity. 8vo. *London*, 1796

Harrington. Experiments and observations on Volta's Pile, &c. 8vo. *Carlisle*, 1801

The death-warrant of the French system of Chemistry, &c. 8vo. *London*, 1804

Harris, John. *Born about* 1667; *died September* 17, 1719.

Navigantium . . Bibliotheca, or a complete collection of Voyages, &c. . . Introduction . . Loadstone. 8vo. (*From Watt.*) *London*, 1702

Navigantium . . Bibliotheca, or a complete collection of Voyages, &c. . . Introduction . . Loadstone. 8vo. (*From Watt.*) *London*, 1705

† Harris, Joseph. An account of some Magnetical observations made in the months of May, June, and July, 1732, in the Atlantick, or Western Ocean; as also the description of a Water-spout. Communicated by Mr. George Graham, F.R.S. 4to. 5 pp. 1 plate. (*Phil. Trans.* xxxviii. for 1733-34, p. 75.) *London*, 1835

*† **Harris**, Salom. Of the influence of Solar and Lunar attraction on Clouds and Vapours. 8vo. 6 pp. (*Phil. Mag.* xxxvi. 58.) *London*, 1810

Harris (afterwards Sir), William Snow. Electrical Conductors for Ships. Experiment in Plymouth Harbour. 8vo. 7 pp. (*Phil. Mag.* lx. 231.) *London*, 1822

† Observations on the effects of Lightning on floating bodies, &c. with an account of a new method of applying fixed and continuous Conductors of Electricity to the Masts of Ships. Letter to Sir T. B. Martin. 4to. 89 pp. 5 plates. *London*, 1823

(*Note.—The illustration accompanies plate* i. *The lines on the paper originally consisted of gold leaf. . . A discharge has been passed over the gold leaf to show by its deflagration the course of the electric matter.*)

On the Laws of Electric accumulation. 8vo. (*Trans. of the Plymouth Instit.* Nov. 1825.) *Plymouth*, 1825

† On the relative powers of various metallic substances as Conductors of Electricity. Read Dec. 14, 1826. 4to. 7 pp. 1 plate. (*Phil. Trans.*) *London*, 1827

† Experimental inquiries on Electrical accumulation. 8vo. 53 pp. 4 plates. (*From the Trans. of the Plymouth Institution.*) *Plymouth*, 1828

Inquiries concerning the Laws of Magnetic forces, containing a description and drawing of a new Magnetical instrument for measuring these forces. 4to. (*Edinb. Phil. Trans.* April 1829.) *Edinburgh*, 1829

† On the utility of fixing Lightning Conductors on Ships. 8vo. 23 pp. (*Roget's copy.*) *Plymouth*, 1830

† On the transient Magnetic state of which various bodies are susceptible. 4to. (*Phil. Trans. for* 1831, part i.) *London*, 1831

On the influence of Screens in arresting the progress of Magnetic action, and on the power of masses of iron to control the attractive force of a Magnet. 4to. (*Phil. Trans. for* 1831.) *London*, 1831

On a new Electrometer, and on the heat excited in Metallic bodies by Voltaic Electricity. 4to. (*Edin. Phil. Trans.* Dec. 1831.) *Edinburgh*, 1831

On the transient Magnetic state of which various substances are capable. Communicated by Davies Gilbert, Esq. 4to. 24 pp. 2 plates. *London*, 1831

On the employment of vibrating Magnetic bars in experimental inquiries relative to the Earth's magnetic intensity. 8vo. (*British Association Report for* 1832, vol. ii.) *London*, 1832

On the investigation of Magnetic intensity by the oscillation of the horizontal needle. 4to. (*Edinb. Phil. Trans.* Jan. 1834.) *Edinburgh*, 1834

† On some elementary laws of Electricity (first series), containing an account of several new instruments and discoveries in Electricity. 4to. 33 pp. 3 plates. (*Phil. Trans. for* 1834.) (*Faraday's copy.*) *London*, 1834

Three short papers on Electricity. 8vo. (*British Association Reports for* 1835.) *London*, 1835

† A series of Papers on the defence of Ships and Buildings from Lightning. 8vo. 46 pp. (*Nautical Magazine*, xxv.) *London*, 1835

On the nature of Electrical repulsion. 8vo. (*British Association Reports for* 1836.) *London*, 1836

† Inquiries concerning the Elementary Laws of Electricity. Second Series. 4to. 36 pp. 2 plates. (*Phil. Trans. for* 1836, part ii.) *London*, 1836

A series of three Papers, termed Illustrations of cases of damage by Lightning in the British Navy. (*Nautical Magazine for* 1838.) *London*, 1838

† State of the question relating to the protection of the British Navy from Lightning, by the method of fixed Conductors of Electricity, as proposed by Mr. Snow Harris. With appendix. 8vo. *Plymouth*, 1838

Harris (afterwards Sir), William Snow—*continued.*

The Bakerian Lecture. Inquiries in Electricity (third series), containing a further investigation of the Phenomena of Electrical induction and attraction. 4to. (*Phil. Trans. for* 1839, part ii.) *London*, 1839

† On Lightning Conductors, and on certain principles in Electrical science; being an investigation of Mr. Sturgeon's experimental and theoretical researches in Electricity, published by him in the *Annals of Electricity*, &c. 8vo. 12 pp. 1 plate. (*Phil. Mag. for* Dec. 1839, p. 463.) (*Faraday's copy.*) *London*, 1839

† Commission appointed to inquire into the plan of W. S. Harris. Copy of the report and evidence relating to the protection of Ships from the effects of Lightning. Ordered by the House of Commons to be printed 11th Feb. 1840. Folio. 96 pp. 12 plates. *London*, 1840

On the course of the Electrical discharge, and on the effects of Lightning on certain ships of the British Navy. 8vo. (*From his Record of Phil. Papers*, p. 4.) (*Edinb. and Lond. Phil. Mag.* Feb. and March, 1840.) *London*, 1840

† On Lightning Conductors, and the effects of Lightning on H.M.'s ship "*Rodney*" and certain other ships of the British Navy; being a further examination of Mr. Sturgeon's Memoir on Marine Lightning Conductors. 8vo. 12 pp. 1 plate. (*Annals of Electricity*, iv. 484.) *London*, 1840

† Extract of a letter from W. S. Harris to W. Sturgeon. 8vo. 13 pp. (*Anns. of Electricity*, v. 208.) (*Roget's copy.*) *London*, 1840

On the supposed Electro-magnetical effects of Marine Lightning Conductors. (*Nautical Magazine*, Enlarged Series, No. 2, vol. for 1841.) 1841

On the specific conductive capacity of various Electrical substances. 4to. (*Phil. Trans. for* 1842.) *London*, 1842

Observations on the action of Lightning Conductors. (*Proc. London Elec. Soc. for* 1842.) *London*, 1842

† On the effects of Lightning on the British ship "*Underwood.*" 8vo. 8 pp. (*Nautical Mag. for* June 1842.) (*Roget's copy.*) *London*, 1842

† On the nature of Thunderstorms, and the means of protecting Buildings and Shipping against . . Lightning. 8vo. *London*, 1843

A theoretical and practical view of Thunderstorms, and the protection of Buildings and Ships from Lightning. (*From his Record of Phil. Papers*, p. 6.) *London*, 1843

† On Damage by Lightning in the British Navy. 8vo. 66 pp. (*Extract from the Nautical Magazine*, 1843.) *London*, 1843

† Meteorology of Thunderstorms at Sea, with analytical deductions, and a history of the effects of Lightning on 210 ships of the Royal Navy. 8vo. *London*, 1844

Note.—The first part was printed in the "Nautical Magazine" after the second part containing the history of cases had been completed. The first part has 18 pp.; *the second part is entitled "Damage by Lightning in the British Navy," and has* 66 pp.

† Remarkable instances of the protection of certain Ships of H.M.'s Navy from the destructive effects of Lightning; collected from various authorities. 8vo. 18 pp. *Plymouth*, 1844

Remarkable instances of defence of certain Ships of the Royal Navy from the destructive agency of Lightning, with practical and theoretical deductions. (*From his Record of Phil. Papers*, p. 6.) *London*, 1846

Letter to the Secretary of the Incorporated Society for building Churches, &c. on the Preservation of Public Buildings from Lightning. 8vo. (*From his Record of Phil. Papers*, p. 6.) *Plymouth*, 1847

A Public Official Letter to the India Board, dated June 21, 1847, relative to a Board Order requiring all Transports to be fitted with his Conductors. (*From his Record of Phil. Papers*, p. 7.) 1847

Harris (afterwards Sir), William Snow—*continued.*

† Remarkable instances of the protection of certain Ships . . from the destructive effects of Lightning. . . 8vo. 61 pp. 2 plates. *London*, 1847

Instructions for the application of permanently fixed Conductors in H.M.'s ships, drawn up for the use of H.M.'s dockyards. Printed by order of the Lords Commissioners of the Admiralty. (*From his Record of Phil. Papers.*) *London*, 1848

Rudimentary Electricity. 1st edition. 12mo. 160 pp. *London*, 1848

† Letter to the Earl of Wilton on returns . . . relative to . . . fixed Metallic Conductors employed in H.M.'s Navy. 8vo. 35 pp. *Plymouth*, 1849

† Letter on the Preservation of Public Buildings from . . . Lightning (revised) addressed to the . . . Society for building Churches, &c. dated December, 1847. 8vo. 12 pp. *London*, 1850

† On the relative Cost and Efficiency of permanent and temporary forms of Lightning Conductors as applicable to the defence of the Royal Navy. 8vo. 27 pp. *Plymouth*, 1850

† Rudimentary Magnetism. . . Parts i. and ii. 12mo. 159 pp. *London*, 1850

† Remarkable instances of the Preservation of certain Ships of the Royal Navy from Lightning. Abridged from Official and other authenticated Reports. 8vo. 19 pp. *Plymouth*, 1850

Rudiments of Electricity. New edition. 12mo. *London*, 1851

† Rudimentary Magnetism. . . Part iii. 12mo. 186 pp. *London*, 1852

† Destruction of Merchant Ships. Shipwreck by Lightning. 8vo. 6 pp. (*Nautical Magazine for November*, 1852.) *London*, 1852

† Papers relating to Harris's Lightning Conductors and the destructive effects of Lightning on Ships. Fol. 11 pp. 2 plates. *London*, 1852

† A record of (his Philosophical Papers, &c. 8vo. 7 pp. *Plymouth*, 1852 ? (*Note.—Latimer Clark's Catalogue says probably* 1852.)

† Papers relative to Harris's Lightning Conductors. Appendix, with Addendum of 1 sheet. Fol. 37 pp. *London*, 1852

† Review of the History and Progress of the general system of Lightning Conductors . . in the Royal Navy. 8vo. 10 pp. (*Reprinted from the Nautical Magazine for March*, 1853.) 1853

† Shipwrecks by Lightning. Copies of papers relative to Shipwrecks by Lightning as prepared by Sir Snow Harris, and presented by him to the Admiralty. Fol. 82 pp. 5 plates. *London*, 1854

† On a general law of Electrical Discharge. 8vo. 21 pp. 1 plate. (*Phil. Mag. for May*, 1856.) *London*, 1856

† Rudimentary treatise on Galvanism and the general principles of Animal and Voltaic Electricity. . . 12mo. 215 pp. *London*, 1856

† On certain phenomena of Electrical Discharge. 8vo. 6 pp. (*Phil. Mag. for August*, 1856.) *London*, 1856

† Leçons élémentaires d'Electricité . . . traduites et annotées par Garnault. 12mo. 264 pp. cuts. *Paris*, 1857

† Researches in Statical Electricity. (No. 1.) 8vo. 27 pp. (*Phil. Mag.* 1857.) *London*, 1857

† On some special laws of Electrical Force. 8vo. 4 pp. (*Phil. Mag. for August*, 1857.) *London*, 1857

† Rudimentary Electricity; being a concise exposition of the general principles of Electrical Science. . . Fifth edition. 12mo. 196 pp. 1 cut separate. *London*, 1859

Instructions for the application of permanently-fixed Conductors in H.M. ships, drawn up for the use of H.M. Dockyards. Printed by order of the Lords Commissioners of the Admiralty.

Harris (afterwards Sir), William Snow—*continued.*

† New Steering Compass, by Mr. Snow Harris. . . . Constructed by W. C. Cox, optician, Devonport. 8vo. 3 pp. (*Faraday's copy.*) *Plymouth*

On a new and improved form of the Mariners' Compass employed in several ships of the Royal Navy and in H.M. yacht, and in much repute in the merchant service. *From his Record of Papers*, p. 5. (*Reports of the Royal Polytechnic Society of Cornwall.*)

† A treatise on Frictional Electricity, in Theory and Practice. Edited, with a Memoir of the author, by Charles Tomlinson, F.R.S. 8vo. 291 pp. *London*, 1867

† Rudimentary Electricity: showing the general principles of Electrical Science and the purposes to which it has been applied (by the late Sir W. S. Harris). Sixth edition (with additions). 12mo. 200 pp. *London*, 1868

Rudimentary Magnetism: a concise Exposition of the general principles of Magnetical Science, and the purposes to which it has been applied. Second edition, revised and enlarged, by H. M. Noad, Ph.D., F.R.S. &c. *London*, 1872

† Harrsch, F. L. Pyrotechnia sublimis seculi primævi vel liber meteorarum. 4to. 131 pp. 3 plates. *Viennæ*, 1778

Harsu, Jacques de. *Born* 1730, *at Geneva; died* 1784, *at Geneva.*

Recueil des effets salutaires de l'Aimant, dans les maladies. 12mo. 276 pp. *Genève*, 1783

Hartmann, George. *Born February* 9, 1489, *at Eckoltsheim, bei Bamberg; died April* 9, 1564, *at Nürnberg.* (*Pogg.* i. 1023)

Briefwechsel mit dem Herzog Albrecht von Preussen. 8vo. (*Dove's Repertorium*, ii. 129.)

"Entdeckte (obwohl unvollkommen) diamagn. Inclination, so wie anderere Eigenschaften des Magnets (S. seinen Briefwechsel mit dem Herzog Albrecht von Preussen im. J. 1544. *Berlin*, 1544

(*Lamont, Astronomie u. Erdmagnetismus*, p. 250, *says*, "*Um eben diese Epoche entdeckte G. Hartmann . . . dass eine an ihrem Schwerpunkte aufgehängte Nadel nicht wagerecht sich stelle, sondern wie er sich ausdrückt 'unter sich zeige.'*" . . . *Carl. Elekt. Naturkraft*, p. 8, *mentions this letter. Dove in his Catalogue*, p. 274, *says he made the discovery in* 1543.)

† Hartmann, Johann Friedrich. *Born . . .; died May* 30, 1800.

Abhandlung von der Verwandschaft und Ahnlichkeit der elect. Kraft mit den erschrecklichen Luft-Erscheinungen. 8vo. 253 pp. 1 plate. *Hannover*, 1759

Beschreibung eines elektr. Glockenspiels. 8vo. (*Hamb. Mag.* xxiv. 1759.) *Hamburg*, 1759

Merkwrd. elektr. Versuche mit d. Verstärkungsflasche. 8vo. (*Hamburg Mag.* xxiv. 1759.) *Hamburg*, 1759

Verbesserter Versuch seines künstl. elektr. Blitzes. 8vo. (*Hamb. Mag.* xxiv. (1759.) *Hamburg*, 1759

De electricitate plumæ Psittaci notata quadam. 4to. (*Nov. Act. Nat. Cur.* t. iv. s. 76-82.) *Nüremberg*

Versuche über d. Erderschütterung. 8vo. (*Hamb. Mag.* xxv. (1761.) *Hamburg*, 1761

Anmerkungen über die nöthige Achtsamkeit bey Erforschung der Gewitter-Elektricität, nebst Beschreibung eines Electricität-Zeigers. Vorgelesen den 7 April, 1764. 4to. 57 pp. 2 plates. (*Soc. des Wissen. Göttingen.*) *Hannover*, 1764

Versuche im Lufbleeren Raume. 8vo. 3 plates. (*Saxtorf*, tom. ii. p. 508, *says*, "*Electrische Experimente im lufbleeren Raume Hanover.*") *Hannover*, 1766

Hartmann, Johann Friedrich—*continued.*

Die angewandte Elect. bei Krankheiten des menschlichen Körpers. 8vo. 1770

Newen Erklarung der Entstehungsart der Donnerwetter. (*Göttingischen gemein. Abhandl. von J.* 1775.) *Göttingen*, 1775

Natürl. Luftelektricität d. Atmosphäre, tabell. entworfen. 8vo. *Hannover*, 1779

Encyclopädie der elekt. Wissenschaften; als ein Vorbereitung zu nehrer Kent. der Elect.; tabellarich entworfen. 4to. 256 pp. (*In Bibl. Genevæ.*) *Bremen*, 1784

Brachium paralyticum mediante electricitate persanatum. 4to. (*Nov. Acta Acad. Nat. Curios.* iv. 126.) *Norimbergæ*

Hartmann, Philipp Jacob. *Born March* 26, 1648, *at Stralsund*; *died March* 28, 1707, *at Königsberg.*

An account of Amber. (*Phil. Trans. Abd.* ii. 473.)

Succini Prussici physica et civilis historia. 8vo. (*From Kunitz*, p. 62.) *Erfurt*, 1677

† Succini Prussici physica et civilis historia cum demonstratione. . . 8vo. 291 pp. 3 plates. *Francofurti*, 1677

Succincta, succini Prussici Hist. et Demonstratio. 4to. (*From Watt.*) *London*, 1679

Exercitatio de generatione mineralium, vegetabilium, et animalium in aere, occasione annonæ et telæ cœlitus delapsarum 1686 in Curonia. 4to. (*Miscell. Acad. Nat. Curios. Dec.* 2, *An.* 7, 1688, *Append.* p. 1.) *Norimberg*, 1688

† Succinta succini Prussici Historia et Demonstratio. 4to. 48 pp. (*Phil. Trans.* xxi. 5.) *Berol.* 1699

† An account of several curiosities relating to Amber, lately sent to the Royal Society from Philippus Jacobus Hartmannus (author of the Account of it published last Transaction), and which are now in their repository at Gresham College. 4to. 2 pp. (*Phil. Trans.* xxi. *for* 1699, p. 49.) *London*, 1700

De sudore unius lateris. 4to. *Hal*, 1751

Hartsoeker, Nicolaus. *Born March* 26, 1656, *at Gouda*; *died December* 10, 1725, *at Utrecht.*

Principes de Physique. *Paris*, 1696

Conjectures physiques. 4to. 14 and 371 pp. *Amsterdam*, 1706

† Suite des Conject. physiques. 4to. 147 pp. 1 plate. *Amsterdam*, 1708

† Eclaircissements sur les Conject. 4to. 189 pp. *Amsterdam*, 1710

† Suite des Eclaircissements sur les Conject. 4to. 104 pp. *Amsterdam*, 1712

2de Partie de la Suite des Conj. 4to. 156 pp. 11 plates. *Amsterdam*, 1712

Cours de Physique. 4to. (*From Cat. Bibl. Lyon.*) *La Haye*, 1730

† Harvey, G. Remarks on the influence of Magnetism on the Rates of Chronometers. 8vo. 11 pp. (*Edinb. Phil. Journal*, x. p. 1.) *Edinburgh*, 1824

Harward, S. Discourse of several kinds and causes of Lightning. 4to. (*From Watt.*) *London*, 1604

† Harzer, F. Die Magnet-Electricität als motorische Kraft. Practische Anwendung des Electro-Magnetismus auf Telegraphie, so wie auf den Betrieb der Uhren und anderer Maschinen. 2 vermehrte Auflage. 8vo. 236 pp. 18 plates. (*Neuer Schauplatz der Künste und Handwerke*, 176 Bd.) *Weimar*, 1854

† Hasper, W. Galvanoplastik. Gründliche Anleit. für Buchdrucker, Schriftgiesser, Kupferstecher, &c. . . 8vo. 56 pp. *Carlsr.* 1858

Hassencamp, J. M. Wie ein Ort durch Wetterableiter zu sichern. *Rinteln*, 1782

Von den grossen Platzen d. Strahlableiter, u. ihrer vortheilhaftesten Einrichtung zur Beschützung ganzer Städte. *Rinteln*, 1684

Hassenstein. Chemisch Electrische Heilmethode. *Leipzig*, 1853

Hassenstein, C. H. Het magnetismus en de electriciteit, anbevolen als een krachtig, wetenschappelijk en rationeel geneesmiddel. Naar de 3 Hoogduitsche uitgave bewerkt, door een M.D. 8vo. 18 plates. *Amsterdam*, 1852

† Das elektrische Licht. Erläuternde und kritische Besprechung seiner Benutzung zur Beleuchtung von Strassen, Nebst Beschreibung der neuesten Regulatoren zur Erhaltung eines ganz gleichmässigen Lichtes. 8vo. 194 pp. 15 plates. *Weimar*, 1859

Hassius, C. G. Carmen elegiacum de electricitatis corporum stupenda utilitate. ("*Auctore Christ Günth. Hassio.*") (*From Krunitz*, p. 63.) *Leipsig*, 1744

Hatcher, W. H. Electric Telegraph, account of. 12mo. (*From English Cat.* 1864, p. 342). *London*, 1847

† **Hatchett,** C. An Analysis of the Magnetical Pyrites; with remarks on some of the other Sulphurets of Iron. 8vo. 15 and 9 pp. (*Phil. Mag.* xxi. 133, 213.) *London*, 1805

† **Hatchett.** On the Electro-Magnetic Experiments of MM. Œrsted and Ampère. 8vo. 10 pp. (*Phil. Mag.* lvii. 40.) *London*, 1821

Hauch, Adam Wilhelm von. *Born September* 26, 1755, *at Kopenhagen; died February* 26, 1838, *at Kopenhagen.*

A lu devant *l'Acad.* . . . de *Copenhagen* un Mémoire. (On decomposition of water by the Galvanic Pile.) (*Vide Sue*, ii. 256, *who refers to the Journ. de Chimie de Van Mons*, i. 109, *about* 1800.)

On Galv. parallelismus cum elect. diversitas. (*Nordischen Archives*, ii. 2 St. p. 1.)

Forsog til et forbedret Udlade-Electrometer. 4to. (*Vidensk. Selsk. Skrift. Ny Samml.* iv. 1793.) *Kopenhagen*, 1793

Beskrivelse af en ny Luftpröver eller Eudiometer. 4to. (*Vidensk. Selsk. Skrift. Ny Samml.* 1793.) *Kopenhagen*, 1793

Om Luft-Electricitet. (*Skandinav. Museum*, ii. 1798.) *Kopenhagen?* 1798

Von der Luftelekt. besonders mit Anwendung auf Gewitterableiter. 8vo. *Kopenhagen*, 1800

Oversigt af Ligheden og Uligheden imellem Galvanismen og Electriciteten, etc. (*Bibl. for Physik, Medicin og Oekon*, xix. 1800.) *Kopenhagen*, 1800

Zwo. physikal Abhand. (1) von Gewitter in Winter in Norweg. (2) Resultat v. Versuch. 8vo. *Kopenhagen*, 1801

Hauff, Johann Karl Friedrich. *Born April* 21, 1766, *at Stuttgart; died October* 24, 1846, *at Brussels.*

De nova methodo naturam et leges phæn. elect. Galvanismi cognoscendas. 4to. *Marburg*, 1803

(*Poggendorff* (i. 1033) *says*, "*Quæ a Galvano cognomen vortita sunt investigandi. Comment.*")

Neuer galvan. Apparat. 8vo. (*Gilbert's Ann.* xv. 1803 u. xviii. 1804.) *Leipzig*, 1803-4

Hauksbee, Francis. *Died about* 1713.

† Experiments on the Production and Propagation of Light from the Phosphorus *in vacuo*, made before the Royal Society. 4to. 2 pp. (*Phil. Trans.* xxiv. *for* 1704-5, p. 1865.) *London*, 1706

† Several Experiments on the Mercurial Phosphorus made before the Royal Society, at Gresham College. 4to. 7 pp. 1 plate. (*Phil. Trans.* xxiv. *for* 1704-5, 2129.) *London*, 1706

Hauksbee, Francis—*continued.*

† Several Experiments on the Attrition of Bodies *in vacuo*. Made before the Royal Society at Gresham College. 4to. 11 pp. 1 plate. (*Phil. Trans.* xxiv. *for* 1704-5, p. 2165.) *London*, 1706

† An account of an Experiment touching the production of a considerable Light upon a slight attrition of the hands on a glass globe exhausted of its air; with other remarkable occurrences. 4to. (*Phil. Trans.* 1706, p. 2277.) *London*, 1706

An account of an Experiment made before the Royal Society of Gresham College touching the extraordinary Electricity of Glass, producible on a smart attrition of it; with a continuation of experiments on the same subject and other phenomena. 4to. (*Phil. Trans.* 1706, p. 2327.) *London*, 1706

Several Experiments showing the strange effects of the Effluvia of Glass producible on the motion and attrition of it. 4to. (*Phil. Trans.* 1707, p. 2372.) *London*, 1707

An account of the repetition of an Experiment touching motion given to bodies included in a glass, by the approach of a finger near its outside; with other Experiments on the Effluvia of Glass. 4to. (*Phil. Trans.* 1708, p. 82.) *London*, 1708

An account of an Experiment touching the production of Light within a glass globe, whose inward surface is lined with sealing-wax, upon an attrition of its outside. 4to. (*Phil. Trans.* 1708.) *London*, 1708

An account of some Experiments touching the Electricity and Light producible on the attrition of several bodies. 4to. (*Phil. Trans.* 1708, p. 87.) *London*, 1708

An account of an Experiment showing that an object may become visible through such an opaque body as pitch, in the dark, while it is under the circumstances of attrition and a vacuum. 4to. (*Phil. Trans.* 1709, p. 391.) *London*, 1709

† Physico-mechanical Experiments on various subjects. 1st edition. 4to. 7 plates. 194 pp. *London*, 1709

An account of an Experiment touching an attempt to produce Light on the inside of a globe glass lined with melted flowers of sulphur; as in the experiments of sealing-wax and pitch. 4to. (*Phil. Trans.* 1709, p. 439.) *London*, 1709

An account of an Experiment concerning an endeavour to produce a Light thro' a metallick body, under the circumstances of a vacuum and attrition. 4to. (*Phil. Trans.* 1711, p. 328.) *London*, 1711

An account of Experiments concerning the proportion of the power of the Loadstone at different distances. 4to. (*Phil. Trans.* 1712, p. 506.) *London*, 1712

† Esperienze fisico-mechaniche sopra varj soggetti contenenti un racconto di diversi stupendi fenomeni intorno la Luce e l'Elettricità . . . Opera . . . tradotta dall' idioma Inglese. 4to. 162 pp. 7 plates. *Firenze*, 1716

† Physico-mechanical Experiments on various subjects . . . to which is added a supplement containing several new experiments not in the former edition. 2nd edition. 8vo. 336 pp. 8 plates. *London*, 1719

† Expériénces méchaniques, trad. par de Bremond et mises au jour, avec un discours preliminaire, des remarques, et notes, par Demarest. 2 vols. 12mo. 7 plates. *Paris*, 1754

(*Vide* also Taylor, B.)

Hausenius, Christian August. *Born June* 19, 1693, *at Dresden; died May* 2, 1743, *Leipzig.*

Hausenius, Christian August—*continued.*

† Novi profectus in hist. electricitatis, post obitum auctoris, ex MSS. ejus editi. Præmissa est commentatiuncula de vita et scriptis viri. 4to. 49 pp. *Lipsiæ*, 1743

Novi profectus in hist. electricitatis post obitum auctoris, ex MSS. ejus editi. Præmissa est commentatiuncula de vita et scriptis viri. 8vo. (*From Heinsius*, ii. 291.) *Lipsiæ et Quedb.* 1745

† **Hausenius**, C. A., et **De Sanden.** Novi profectus in hist. electricitatis, post obitum auctoris, ex MSS. ejus editi. Accessit V. C. Hen. De Sanden. Dissertatio de Succino electricorum principe, quam ed. et de vita B. Hausenii præfatus est Jo. Ch. Gottsched. 8vo. 128 pp. 1 plate. *Lipsiæ*, 1746

Hausen. On the revival of Hawkesby's Globe. (*Danzig Mem.* i. 278.)

Hausmann, J. F. L. Über die Polarität der Harzer Granitfelsen. 8vo. (*Crell's Chem. Ann.* 1803, ii. 207.) *Helmstadt*, 1803

Über die durch Molecularbewegungen in starren leblosen Körpern bewirkten Formveränderungen. (*Abhandl. d. Gesellsch. d. Wiss. zu Gött.* vi. 1853-55; vii. 1856-57.) *Gottingen*, 1853-55-56-57

Hautefeuille, Jean de. *Born March* 20, 1647, *at Orléans; died October* 18, 1724, *at Orléans.*

Nouveau moyen de trouver la déclinaison de l'aiguille aimantée avec une grande précision. 4to. *Paris*, 1683

Balance magnétique, avec des réflexions sur une balance inventée par Perrault, &c. 4to. *Paris*, 1702

Nova ratio accuratissime investigandi aous magneticæ declinationem. (*Opusc. Act. Erudit. Lips.* tom. i. p. 293.)

Hauy, René Just. *Born February* 28, 1743, *at St.-Just, Dép. Oise; died June* 3, 1822, *at Paris.*

Mémoire sur les propriétés électriques de plusieurs minéraux. 4to. (*Mém. de Paris Acad.* 1785, *Mém.* p. 206.) *Paris*, 1785

† Exposition raisonnée de la Théorie de l'Electricité et du Magnétisme . . . d'après les principes de M. Œpinus. 8vo. 238 pp. 4 plates. *Paris*, 1787

Observations sur la structure des crystaux appelés zéolithes, et sur les propriétés électriques de quelques uns. 4to. (*Mém. de l'Inst. Nat.* an. 4, tom. i. *Sc. Mathém. et Phys.* p. 49.) *Paris*, 1795

Observations sur les Aimants naturels. 4to. (*Soc. Philomat.* an. 5, p. 34.) *Paris*, 1796

† Darstellung der Theo. d. Elek. und d. Magn. üb. v. Murhard, mit Anmerkungen. 8vo. 310 pp. 7 plates. *Altenburg*, 1801

Traité de physique. 1st edition (?). 8vo. *Paris*, 1803

† Observations sur l'électricité des substances métalliques. 4to. (*Soc. Philomat.* an. 12, p. 191.) *Paris*, 1804

Observations on the Electricity of Metallic Substances. 8vo. 4 pp. (*Phil. Mag.* xx. 120.) *London*, 1805

Traité de physique. 2nd edition. 2 vols. 8vo. 1806

† Elementary Treatise. (*Translated by Gregory.*) 2 vols. 8vo. plates. *London*, 1807

† On the Electricity of Minerals. 8vo. 5 pp. 1 plate. (*Phil. Mag.* xxxviii. 81.) *London*, 1811

Über d. Elektricität d. Mineralkörper. Uebersetzt von K. C. Leonhard. 8vo. *Frankfürt*, 1812

Traité des caractères physiques des pierres précieuses. 8vo. 3 plates. *Paris*, 1817

Hauy, René Just—*continued.*

Sur la vertu magnétique considerée comme moyen de reconnaître la présence du fer dans los minéraux. (*Mém. Mus. Hist. Nat.* iii. 1847, p. 169.) *Paris*, 1817

† Trattato dei caratteri fisici delle pietre preziose. Traduzione con Note del Configliachi. 8vo. 227 pp. 3 plates. *Milano*, 1819

Neue Beobachtungen u. Studien üb. d. Elektric. d. Mineralkörper; a. d. Franz. m. Aumerk. v. J. J. Nogeruth. 8vo. *Bonn*, 1819

Traité élément. de physique. 3rd edition. 2 vols. 8vo. *Paris*, 1821

Traité de Minéralogie. *Paris*, 1822

† Sur l'électricité, produite dans los minéraux, à l'aide de la Pression. 4to. 6 pp. (*Mém. du Muséum*, tom. iii.) *Paris*

Hauy, V. Mémoire historique sur les télégraphes en général, et sur les diverses tentatives faites pour en introduire l'usage en Russie. 8vo. 56 pp. *Petersburg*, 1810

Hawksley. Variations, Magnetic. (*From Churchman, Introd.* p. xv.). 1745

Hayez, E. De meteorum intervallis a superf. terræ mensur. 4to. 182—?

† **Head**, F. (Sir). Stokers and Pokers; or, the North-Western Electric Railway, Telegraph, &c. New edition. 8vo. *London*, 1861

† **Hearder**, J. N. On the application of Cast Iron as a substitute for Steel, in the construction of very powerful permanent Magnets, with a specimen of a Cast Iron Magnet of great power, and a detail of some peculiar phenomena connected with its magnetic properties. 8vo. 13 pp.

Hearn. On the cause of the discrepancies observed by Mr. Baily with the Cavendish apparatus for determining the mean density of the Earth. 4to. (*Phil. Trans.* 1847, p. 217.) *London*, 1847

† **Heathcote.** Extract of a Letter to Mr. Flamsteed, from Cabo Cars Castle, on the Coast of Guinea, the 14th Dec. 1683, concerning the Tide on that Coast, Variation of the Needle, &c. 4to. 1 page. (*Phil. Trans.* xiii. 1683, p. 578.) *London*, 1683

† **Hédouin**, Paul. L'Electricité appliquée au sondage des Mers. Les Câbles électriques sous-marins. I. Sondage des Mers. II. Appareils déjà connus et appliqués. III. Electro-Barathromètre. 8vo. 81 pp. 6 plates. *Paris*, 1870

Heer. (*Vide* Vorselman de Heer.)

Heeren, Friedrich. *Born August* 11, 1803, *at Hamburgh.*

† Der elektrische Telegraph. 8vo. 32 pp. (*Besonderer Abdruck aus dem technischen Worterbuch von K. Karmarsch und F. Heeren.*) *Prag*, 1854

† **Hehl.** Anleitung zur Errechtung und Untersuchung der Blitzableiter fur Bauverstandige, Bau- und Feuerbeschauer und Gebaude-Inhaber. 8vo. 54 pp. *Stuttgart*, 1827

† **Hehl**, Joh. Über electro-dynamische Vertheilung. 4to. 12 pp. 1 plate. (*Programm der höreren Gewerbeschule in Cassel.*) *Cassel*, 1841

Heidenreich. Phys.-chem. Untersuchungen des Bluts durch die electrische Saule. (*Neue medicin. Zeitung*, 1847, No. 31.) 1847

† **Heidmann**, J. A. Vollständige . . . Theorie der Elektricität. 2 vols. 8vo. 5 plates. *Wien*, 1799

Vollständ. Theorie der Elektricität. 2 vols. 8vo. *Wien*, 1803

Zuverl. Prüfungsart z. Bestimm. d. wahr. von d. Scheintode; nebst einer physiologischen Erfahr. aus d. Anwend. d. verstärk, galvanischen Electricität d. theorischen Organismus. 8vo. *Wien*, 1804

† Vollständige auf Versuche, &c. gegründete. . . Theorie der Galvanischen Elektricität. . . i. Band. 8vo. 258 pp. 2 plates. *Wien*, 1806

Heidmann, J. A.—*continued.*

† Theory of Galvanic Electricity, founded on experience. Abridged by M. Guyton from Ann. de Chim. lxi. p. 70. 8vo. 8 pp. (*Phil. Mag.* xxviii. p. 97.) *London*, 1807

Heidmann, J. H. Observations physico-électriques. (*Journal de Chimie*, tom. vi. p. 190.)

† Hein, Theod. Analyse eines Meteoriten aus Dacca in Bengalen. . . 8vo. 4 pp. (*Sitzb. d. k. Akad. d. Wissensch.* ii. Abth. Oct.-Heft, Jahrg. 1866, Bd. lvi.) *Wien*, 1866

Heine. Beobachtungen über Lähmungszustände der unteren Extremitäten und deren Behandlung. *Stuttgart*, 1840

Heineken, C Meteorological Register kept at Funchal in Madeira in the year 1826; with some prefatory observations on the climate of that island, &c. 8vo. 13 pp. (*Phil. Mag. or Annals*, ii. 362 and 411.) *London*, 1827

Heinrich, Placidus. *Born October* 19, 1758, *Schierling*, *Regenkreis*, *Bayern*; *died January* 18, 1825, *Regensberg*.

Ueber die Wirkung des Geschützes auf Gewitterwolken. 4to. (*Neue Abhandl. der Baierischen Akad. Philos.* v. p. i.) *München*, 1789

Über d. Schäffer'schen Pendelversuche. 8vo. (*Gilb. Ann.* xxvii. 1807.) *Leipzig*, 1807

† Die Phosphorescenz der Körper. . . 1ste Abhandl. Von der durch Licht bewerkten Phosphorescenz. "Dritter Abschnit Phosphorescenz durch Bestrahlung mittelst. der electrischen Lichts." 4to. 132 pp. (*Volta's copy.*) *Nüremberg*, 1811

Versuche mit Phosphor. 8vo. (*Schweigg Journ.* iv. 1812.) *Nürnberg*, 1812

Die Phosphorescenz der Körper. . . 2te Abh. 4to. 312 pp. (*From Journ. de Phys.* lxxiv. pp. 158 and 307. *Nüremberg*, 1812

Über Phosphorescenz im Pflanzen. u. Thierreich. 8vo. (*Schweigg. Journ.* xiii. 1814.) *Nürnberg*, 1814

Die Phosphorescenz der Koerper. 2 vols. 4to. (*From Journ. de Phys.* lxxxv. 158 and 307.) *Nüremberg*, 1814

Über Zamboni's Säule. 8vo. (*Schweigg. Journ.* xv. 1815.) *Nürnberg*, 1815

Die Phosphorescenz der Körper. . . 3tte. Abhand. 4to. 424 pp. *Nüremberg*, 1815

Die Phosphorescenz der Körper. . . 4te. Abhand. 4to. 596 pp. *Nüremberg*, 1820

Phosphorescenz durch Erwarmung u. durch Bestrahlung. 8vo. (*Schweigg. Journ.* xxix. 1820.) *Nüremberg*, 1820

† Heinrichsen, H. Ideen üb. d. wechselseitige Elektricitäts-verhältniss zwischen dem thier. Organismus u. d. aussern Natur, mit Entfaltung zweier, bisher übergangener, alle Processe d. Lebens bedingender Naturkrafte. 8vo. 330 pp. *Leipzig*, 1839

Das Wesen d. Wechselfiebers d. Fallsucht u. d. Blennorrhoe, dargest. von Seiten ihrer elektr. Natur, &c. . . 8vo. *Leipzig*, 1839

Heinsius, W. Allgemeines Bücher-Lexikon, od. vollständ Alphabet. Verzeichniss aller v. 1700 b. zu. Ende 1827 erschien. Bücher, welche in Deutchland u. in den durch Sprache u. Literatur. damit verwandten Ländern gedruckt worden sind xx. 7 vols. Welcher die v. 1822 b. Ende 1827 erschien Bücher u. d. Berichtigungen früh. Erscheinungen enthält. Hrsg. v. C. G. Kayser. M. 2 Anh. 4to. *Leipzig*, 1828-29

Algemeines Bücher-Lexikon od volständ. alphabet. Verzeichniss aller von 1700 bis Ende 1867 erschienen Bucher, welche in Deutchland u. in den durch Sprache u. Literatur damit verwandten Landern gedruckt worden sind. Nebst Augabe der Druckörter, der Verleger, der Preise ze. 14, Bd. welche die von 1862 bis Ende 1867 erscheinen Bücher u. die Berichtiggn früherer Ercheinungen enthalt. Hrsg. v. *Karl Rob. Newmann*, 8 u. 9 *Lfg.* 4to. *Leipzig*, 1869

Heintz, W. H. Eigenthümlich elektroskopische Zuständ d. Glases. 8vo. (*Poggend. Ann.* lix. 1843.) *Leipzig*, 1843

Heinze, Johann, Georg. *Born April* 23, 1719, *at Suhla Henneberg; died December* 28, 1801.

Neue elekt. Versuche mit der von Marum erfundenen Electrisir Machine, und dem vom Schoffer bekannt gemachten elektricitats Kager in einem Schreiben an Hrn. Gondela, bekannt gemacht. 4to. *Oldenburg*, 1777

† **Heis**, Ed. Die period. Sternschnuppen und d. Resultate der Erscheinungen, obgelcitet aus den während der letzten 10 Jahre zu Aachen angestellten Beobachtungen. 4to. 40 pp. 1 plate. *Coln*, 1849

† Die Feuerkugel, welche am Abende des 3 December 1861 in Deutschland gesehen worden ist. 8vo. 18 pp. 1 plate. (*Abdruck aus der "Wochenschrift für Astronomie.*) *Halle*, 1862

† Die grosse Feuerkugel, welche am Abende des 4 März 1863, in Holland, Deutschland, Belgien und England gesehen worden ist Nebst einer Karte. 8vo. 56 pp. *Halle*, 1863

† Grosse Feuerkugel in der Nacht des 10-11 März in Westfalen und Hanover. 8vo. 12 pp. *Halle*, 1866

Helfenzrieder, Johann Evangelist. *Born December* 9, 1724, *at Landsberg on Lech; died March*, 1803.

Erläuterung der Weise, wie die Sonnenund Monds-Strahlen zu Gestaltung des Nord-Lichts. . . heraufgebracht werden. . . (*Acta Acad. Moguntinæ*, An. 1778-79, p. 281.) 1778

† Vorschlag. . . die Blitzableiter zei vorbessern. 8vo. 15 pp. *Salzburg*, 1785

A new invention in Lightning Conductors. 8vo. (*Abhand. eine Privat-Gesellschaft*, vol. i. No. 12.) *München*, 1792

Handgriffe bey Errichtung eines Blitzableiters von verbesseter Art. 8vo. (*Abhand. einer Privat-Ges. in Ober-Deutschland*, Th. i. p. 193.) *München*, 1792

Hell (commonly Höll), **Maximilian**. *Born May* 15, 1720, *at Schemnitz, Ung.; died April* 14, 1792, *at Vienna.*

Ephemerides ad Meridian. Vindobon. 8vo. *Vienna*, 1757-91

Anleitung zum nützlichen Gebrauch der kunstlichen Stahlmagnete. 8vo. *Wien*, 1762

An introduction towards the useful employment of artificial Magnets. (*From Lamont, Handb.* p. 436.)

Auroral phænomena (in daylight) at Wardhuis, 3rd July, 1769. (*Acta Lipsiensia pro* 1770, p. 82.) *Lipsiæ*, 1770

Aurorse boreales, theoria nova a Maxim. Hell . . . edita anno 1776. 8vo. *Vindobonæ*, 1776

Ephemerides. An. 1777. Appendix Aurorse theoria. 8vo. *Vindeborni*, 1777

Hellant, Anders. *Born . . . ; died November* 23, 1789.

Magnet-nalens misvisning, etc. i Upsala. 8vo. (*Vet. Acad. Handb.* 1740.) *Stockholm*, 1740

† Abweichungen der Magnet-Nadel in den nördlichsten Theilen Schwedens. (von A. H. beobachtet). 8vo. 2 pp. (*Schwedische Akad. Abdhandl.* An. 1756, vol. xviii. p. 68.) *Hamb. & Leips.* 1756

† Abweichung der Magnet-Nadel an mehreren Stellen innerhalb des Nördlichen Polar-Kreises, beobachtet. 8vo. 4 pp. (*Schwedische Akad. Abhand.* An. 1777, vol. xxxix. p. 285.) *Leipzig*, 1777

Observations of the Needle at Franeker (Auroral Influence). (*Mem. de Swede*, tom. xviii. p. 68.)

Heller, Theodor Aegidius. *Born November*, 1759, *at Reulbach*; *died October* 19, 1810, *at Fulda.*

Über d. Verhalt. trockner u. feuchter Luft bei elektr. Erscheinungen. 8vo. (*Gren's New Journ.* ii. 1795.) *Leipzig*, 1795

Beobach. d. atmospär. Elektricität. 8vo. (*Gren's New Journ.* iv. 1797.) *Leipzig*, 1797

Über d. magnet Mittelpunct d. wirchen Eisens u. dessen Verändr. 8vo. (*Gilbert's Ann.* iv. 1800.) *Leipzig*, 1800

Uber d. Leitungs vermogen d. Wassers; u. üb. d. Licht. elektr. Funkens. 8vo. (*Gilbert's Ann.* vi. 1800.) *Leipzig*, 1800

Entdeckte Veränderungen des . . Magnetismus in ihrem Zusammenhange mit den Ständen der Sonne und des Mondes (Bericht der Münch. Akad.) 1809

Hellwag, Christoph. Friedrich. *Born March* 6, 1754, *Calw, Würtemburg; died October* 16, 1835, *Eutin.*

† Hellwag, C. F. und Jacobi, M. Erfahrungen über die Heilkräfte des Galvanismus, und Betrachtungen über desselben chemische und physiologische Wirkungen, mitgetheilt von Helwag . .; und Beobachtungen bey der medicinischen Anwendung der Voltaischen Säule, von Jacobi. 8vo. 184 pp. 1 plate. (*Volta's copy.*) *Hamburg*, 1802

Helmert. Die geschichtliche Entwickelung der heutigen Telegraphie. 4to. *Dresden.*

Helmholtz, H. L. T. Über d. Methode Kleinste Zeittheile zu messen, u. ihre Anwendung auf physiolog. Zwecke. (*Müller's Archiv*, 1852.) 1852

Über d. Dauer u. d. Verlauf der durch Strömesschwankungen nducirten elektr. Ströme. 8vo. (*Pogg. Ann.* lxxxiii. 1851.) *Leipzig*, 1851

Gesetze d. Vertheilung elektr. Ströme in Körperlich. Leitern, mit Anwendung auf thierische elektrische Versuche. 8vo. (*Pogg. Ann.* lxxxix. 1853.) *Leipzig*, 1853

Helmont, Johann Baptist van. *Born* 1577, *at Brussels; died December* 30, 1644, *at Vilvorde.*

De magnetica . . vulnerum naturali et legitima curatione. 8vo. *Paris*, 1621

† Ortus medicinæ id est Initia physicæ inauditæ progressus medicinæ novus in morborum ultionem ad vitam longam. Auctore J. B. Van Helmont. . . edente auctoris filio, F. M. Van Helmont cum ejus Prefatione, ex Belgica translata. 4to. 800 pp. portrait. *Amsterodami*, 1648

At p. 89, *On Thunder, &c.* P. 90, *Visiones mirabiles in montibus altis.* p. 91 *Historia Tonitrui, &c. At* p. 746, *De Magnetica vulnerum curatione. . .* 34 pp. *Poggendorff* (i. 1060) *says* "*u. viele spätere Ausgaben.*" (*At* p. 6. *his differential Thermometer:* vide *Leslie.*)

Ternary of Paradoxes, Magnetic Cure of Wounds, Nativity of Tartarian Wine, &c. Translated by Dr. W. Charlton, &c. 4to. (*From Spon's Cat.* 1866: *vide also Charlton.*) *London*, 1650

Helmuth, J. H. Beobach. eines im Süden leuchtenden Bogens. *Braunschweig. Anzeig*, 1777, S. 95.) *Braunschweig*

Von d. wohlthätig. Erfindung d. Blitzableiters. (*Braunschw. Anzeig*, 1777, S. 55.) 1777

Über d. Entstehung des Nordlichts. *Braunschweig*, 1777

† Helvetius, J. F. Disputatio philosophica de Magnete. (Thesis.) 4to. 14 pp. *Lugd. Bat.* 1677

† Helvig, C. G. Bemerkungen über Blitz und Donner, nebst Vermuthungen über das Entstehen der Luft-Erscheinungen. 8vo. 32 pp. 1 plate. (*Gilbert's Ann. d. Physik*, li. S. 2, S. 10.) *Leipzig*, 1815

† **Helvig** (General). Direct method of ascertaining the velocity of Cannon-balls. 8vo. 1 p. (*Phil. Mag. or Annals*, iv. 65.) *London*, 1828

Helvig, Major Swedois. **Bourguet, Hermann**, and **Grapengeiser.** Composition of Electric Pile, &c. *Paris*, 1801 ?

Hemmer, Johann Jacob. *Born* 1733, *at Horbach; died May* 3, 1790, *at Mannheim.*

Sur l'Electricité des Métaux. 4to. (*Observ. sur la Phys. Jul.* 1780, p. 50.) *Paris*, 1780

Beschreibung einiger merkwürdiger Wetterschläge. 4to. (*Commentat. Acad. Theodoro-Palatinæ* iv. *Phys.* p. 87.) *Mannheim*, 1780

Zergliederung des beständigen Elektrizitäts-Trägers. 4to. (*Commentat. Acad. Theodoro-Palatinæ* iv. *Phys.* p. 94.) *Mannheim*, 1780

On Experiments with an Electrophorus. (*Mém. de l' Acad. de Mannheim*, vol. iv. p. 112.)

Glückliche Wirkung des elektrischen Feuers bey einer vieljährigen Lahmung. 4to. (*Commentat. Acad. Theodoro-Palatinæ* iv. *Phys.* 116.) *Mannheim*, 1780

Descriptio instrumentorum Societatis Meteorologicæ Palatinæ, etc. 4to. *Mannheim*, 1782

Versuche über d. Thau. (*Pfalzbayr. Beiträge, Hft.* xi. 1782.) 1782

Kurzer Begriff u. Nutzen d. Wetterableiter, u.s.w. 8vo. *Düsseldorf*, 1782

Kurze und deutliche Anweisung wie man, durch einen in jedem Orte wohnenden Schmied, oder andere in Metall arbeitende Handwerker, eine sichere Wetterableitung mit sehr geringen Kosten in allerhand Gebäuden anlegen lassen kann. 8vo. *Friedrichstadt*, 1783

Von Wetterstrahlen, welche Thiere treffen aber nicht tödten. 4to. (*Commentat. Acad. Theodoro-Palatinæ* v. *Phys.* p. 150.) *Mannheim*, 1784

Elektrische Versuche mit belegten Thieren. 4to. (*Commentat. Acad. Theodoro-Palatinæ.*) *Mannheim*, 1784

De fulminis ictibus in campanas, quæ pulsantur, ubi electricitas nubium ac fulminis theoria, nova et uberiore luce perfunduntur. 4to. (*Commentat. Acad. Theodoro-Palatinæ* v. *Phys.* p. 237.) *Mannheim*, 1784

Über d. Glockenläuten bey Gewittern. 4to. (*Commentat. Acad. Theodoro-Palatinæ* v. 1784.) *Mannheim*, 1784

Anleitung Wetterableiter . . anzulegen. 8vo. *Offenbach*, 1786

† Anleitung Wetterleiter . . anzulegen. 2nd edition. 8vo. 232 pp. *Mannheim*, 1788

Verhaltungsregeln u.s.w. 1789

† De electricitate flammæ. 4to. (*Commentat. Acad. Theodoro-Palatinæ* vi. *Phys.* p. 23.) *Mannheim*, 1790

† Gutta serena electricitate feliciter sublata. 4to. (*Commentat. Acad. Theodoro-Palatinæ* vi. *Phys.* p. 47. *Mannheim*, 1790

De variatione acus magneticæ tempore Auroræ borealis. 4to. (*Commentat. Acad. Theodoro-Palatinæ* vi. *Phys.* 317.) *Mannheim*, 1790

Conductorum fulmineorum vim egregiam tribus recentioribus exemplis docet. 4to. (*Commentat. Acad. Theodoro-Palatinæ* vi. *Phys.* 516.) *Mannheim*, 1790

Beobachtung einer Wettersäule nebst Erläuterung. 4to. (*Commentat. Acad. Theodoro-Palatinæ* vi. *Phys.* p. 533.) *Mannheim*, 1790

Merkwürd. Erschein. an einer vorüberziehend. Wolke. 4to. (*Commentat. Acad. Theodoro-Palatinæ* vi. 1790.) *Mannheim*, 1790

Unterr. z. sicherst Anleg. d. Wetterableiter. 8vo. *Mannheim*, 1808

Rathgeber wie man sich vor Gewittern in unbewaffneten Gebäuden verwahren soll 8vo. 1 plate. *Mannheim*, 1809

Hemmer, Johann Jacob—*continued.*

On the analogy of Electricity and Magnetism. (*Rheinische Beitrag zu Gelehrsamkeit for* 1781, 6es Cahir.)

† Variæ curationes electricæ. 4to. (*Commentat. Acad. Theodoro-Palatinæ* v. *Phys.* 321.) *Mannheim*

Nachricht von den in Kurpfalz angeleçtorn Wetterleiten. 4to. (*Commentat. Acad. Theodoro-Palatinæ* iv. *Phys.* p. 21.) *Mannheim*

Enarrationes conductorum fulminis superiore quinquennio variis in locis a se positorum. 4to. (*Commentat. Acad. Theodoro-Palatinæ* v. *Phys.* p. 295.) *Mannheim*

De electricitate animali, ubi in spontaneam præcipue inquiritur. 4to. (*Commentat. Acad. Theodoro-Palatinæ* vi. *Phys.* p. 119.) *Mannheim*

Nachricht von einigen merkwürdigen Wetterschlägen. 4to. (*Commentat. Acad. Theodoro-Palatinæ* vi. *Phys.* p. 324.) *Mannheim*

† Hemmern, Giacomo. Breve istruzione sul conduttor elettrico, e suoi vantaggi. . . 4to. 10 pp. (*Opusc. Scelti*, vi. 388.) *Milano*, 1783

Henckel, Johann Friedrich. *Born August* 11, 1679, *at Merseburg; died Jan.* 26, 1744, *at Freiberg.*

Pyritologia oder Kieshistorie Neue Ausgabe . . 2s Aufl. 8vo. 13 plates. *Leipzig*, 1754

Pyritologie ou histoire naturelle de la Pyrite; on y a joint le Flora Saturnisans, ou l'auteur démontre l'alliance qui se trouve entre les Végétaux et les Minéraux, traduits de l'Allemand par d'Holbach. 2 vols 4to. Folding plates. 1760

† Hengstlin, H. Bietticano. Seleno-tropium maris, seu dissertatio physico-mathematica de æstus marini proprietatibus magneticis in Luna repertis, præside. Dn. Joh. Lud. Mælingo. 8vo. 12 pp. 1 plate. *Tubingæ*, 1682

† Henle, F. G. J. Über Narcine, eine neue Gattung electrischer Rochen, nebst e Synopsis d. electrischen Rochen. 4to. 44 pp. 4 plates. *Berlin*, 1834

† Henle und Meissner. Bericht über Fortschritte der Anatomie und Physiologie. 8vo. 1866

Henley, William. *Died about* 1779.

† An account of the death of a person destroyed by Lightning in the Chapel in Tottenham-Court-road, and its effects on the building; as observed by Mr. Wm. Henley, Mr. Edward Nairne, and Mr. Wm. Jones. 4to. 8 pp. 1 plate. (*Phil. Trans.* lxii. 133.) *London*, 1773

Experiments concerning the different efficacy of pointed and blunted rods in securing buildings against the stroke of Lightning. 4to. (*Phil. Trans.* 1774, p. 133.) *London*, 1774

Electricity, a stimulant for the recovery of persons apparently drowned, or otherwise suffocated. (*Trans. of the Humane Soc.* vol. i. p. 63.) *London*

(*Vide also* Ronayne and Henley.)

Henley, W. T. Télégraphe Electrique, dans lequel les piles sont remplacées par des électro-aimants. 4to. (*Comptes Rendus*, xxx. 412.) *Paris*, 1850

List, &c. of articles (Magnets, &c.) exhibited by him at the Paris Exhibition in 1853. 4to. 5 pp. *Paris and London*, 1853

Henn. De Amperi principiis in phænomenor. electromagnet. doctrina propositis. 8vo. 1850

Henrici, Friedrich Christoph. *Born August* 26, 1795, *at Osnabrück.*

† Über die Elekt. der Galv. Kette. 8vo. *Göttingen*, 1840

Many articles, &c., on Galvanic Electricity, &c. from 1841 to 1850, in *Poggendorff's Annalen*, lii. to lxxx.

Henry Jos. On some modifications of the Electro-magnetic apparatus. 8vo. (*Trans. of the Albany Institute*, i. 22.) *Albany*, 1831

† Contributions to Electricity and Magnetism. No. i. Description of a Galvanic Battery for producing Electricity of different intensities. 4to. 6 pp. 1 plate. (*Trans. Amer. Phil. Soc.* v.) *Philadelphia*, 1835

† On the influence of a Spiral Conductor in increasing the intensity of Electricity from a galvanic arrangement of a single pair. 8vo. 8 pp. (*Taylor's Scient. Mem.* i. 540.) *London*, 1837

† Contributions to Electricity and Magnetism. No. ii. On the influence of a Spiral Conductor in increasing the intensity of Electricity from a galvanic arrangement of a single pair. Read Feb. 6, 1835. 4to. 9 pp. (*Trans. Amer. Phil. Soc.* v.) *Philadelphia*, 1837

† Contributions to Electricity and Magnetism. No. iii. On Electro-dynamic induction. Read Nov. 2. 1838. 4to. 35 pp. (*Trans. Amer. Phil. Soc.* vol. vi. p. 17, Article ix.) *Philadelphia*, 1839

† On a new method of determining the Velocity of Projectiles. 8vo. (*Proc. Amer. Phil. Soc.* iii. 165.) *Philadelphia*, 1843

Contributions to Electricity and Magnetism. 4to. (*Trans. Amer. Phil. Soc.* new series, vol. viii.) *Philadelphia*, 1843

Method of protecting from Lightning buildings covered with metallic roofs 8vo. (*Proc. of Amer. Phil. Soc.* iv. 179.) 1845

† Report concerning a letter of S. D. Ingram to R. Patterson relative to the effect of Thunder on Telegraphic wires. 8vo. 9 pp. 1846

† Extracts from the Proceedings of the Board of Regents of the Smithsonian Institution, in relation to the Electro-magnetic Telegraph. 8vo. 39 pp. 1857

† On the application of the principle of the Galvanic Multiplier to Electro-magnetic apparatus, and also to the development of great magnetic power in soft Iron, with a small galvanic element. 8vo. 12 pp. (*American Journal of Science and Arts*, xix. No. 2.) *Newhaven, U.S.*

† **Henry and Ten Eyck.** Powerful Electro-magnet. 8vo. 2 pp. (*Phil. Mag. or Annals*, x. 314.) (*This is a short account of the Magnet, taken from Silliman's Journal.*) *London*, 1831

Henry, William. *Born Dec.* 12, 1775, *at Manchester; died Sept.* 2, 1836, *at Pendlebury, near Manchester.*

Elements of Experimental Chemistry. 1st edition. 2 vols. 8vo. *London*, 1799

† On the formation of Muriatic Acid by Galvanism. To the Editor of the *Phil. Mag.* dated Manchester, July 23, 1805. 8vo 3 pp. (*Phil. Mag.* xxii. 183.) *London*, 1805

† Description of an apparatus for the Analysis of the compound inflammable Gases by slow combustion; with experiments on the Gas from coal, explaining its application. Communicated by H. Davy. 8vo. 18 pp. 1 plate. (*Phil. Trans.* 1808, part ii.; *Phil. Mag.* xxxii. 277.) *London*, 1808.

† Additional experiments on the Muriatic and Oxymuriatic Acids. 8vo. 7 pp. *Phil. Mag.* xl. 337.) *London*, 1812

† On Sir Humphrey Davy and Dr. Wollaston. (*From 11th edition of Henry's Chemistry*, 1830.) 8vo. 2 pp. (*Phil. Mag. or Annals*, vii. 228.) *London*, 1830

Henshaw, T. Some experiments and observations upon May-dew. 4to. (*Phil. Trans.* 1665.) *London*, 1665

(*Note.—Quere as to Electricity.*)

Hensing, J. T. De germinatione metallica artificiali ejusdemque novo invento 4to. *Giss.* 1718

† **Henwood**, W. J. On the Electric currents observed in some metalliferous veins. 8vo. 20 pp. (*Extracted from the "Mining Review." Reprinted from the "Annals of Electricity," with additions, and an Appendix by the Author.*) *London*, 1837

Herberger, Johann Eduard. *Born . . . at Speyer; died March* 12, 1855, *at Würtzburg.*

Systematisch-tabellarische Uebersicht der chemisch. Gebilde organ. Ursprungs mit genauer Angube ihrer Eigenschaften zc. 1 Liefer. die elektro-positiven, 2 Liefer. die elektro-negativen organchem. Gebilde. Folio. 2 vols. *Nürnberg,* 1831-36

Herbert, Joseph Edler von. *Born September* 2, 1725, *at Klagenfurt; died March* 28, 1794, *at Vienna.*

Theoriæ phænomenorum electricorum . . 1st edition. 8vo. *Wien,* 1772

Von der vortheilhaftesten Reibung, die Elektricität in heftigerem Grade zu erregen. (*Beitrage zu verschieden. Wissenschaften,* 1775.) 1775

† Theoriæ phænomenorum electricorum. . . Editio altera aucta. 8vo. 246 pp. 6 plates. *Vindobonæ,* 1778

Dissertatio de vi electrica aquæ. *Labacii,* 1778

Herder, Siegmund August Wolfgang. *Born Aug.* 18, 1776, *at Bückeburg; died Jan.* 29, 1838, *at Freiburg.*

Diagnostische prakt. Beiträge zur Zuveitezing der Geburts hulfe. (*From Guitard.*) *Leipsig,* 1803

Herepath, J. Mathematical Physics. 2 vols. 8vo. *London,* 1847

Herger. Die Systeme der magnetischen Curven, isogonen und isodynamen nebst anderweitigen empirischen Forschungen über die magnetisch polaren Kräfte ausgeführt in 37 grossen graphischen Darstellungen auf 31 Tafeln und erlautert unter den Auspicien des Herrn Hofrath, Dr. Schottin von J. Ernst Herger, nebst einem Vorworte vom Herrn Dr. G. Erman. Fol. 33 plates =37 figs. 59 pp. *Leipsig,* 1844

Héricart de Thury, Louis Etienne François. *Born June* 3, 1776, *at Paris; died Jan.* 16, 1854, *at Rome.*

† Meteoric iron in France. "Le Globe." 8vo. 1 page. (*Phil. Mag. or Annals* iv. 457.) *London,* 1828

De l'influence des arbres sur la Foudre; et ses effets. 8vo. 27 pp. *Paris,* 1838

Herlicius, D. (Herlich, &c.) Tractatus de fulmine et aliis impressionibus, prodigiis et miraculis. Vom Blitz, Donner und allerbei Feurzeichen, u.s.w. 4to. *Starg,* 1604

Herman, C. G. Mechanischer verbesseter Wind-Regen- u. Trockenheits beobachter. 8vo. (*2nd edition is dated* 1793.) *Freiburg,* 1789

Moniteur électrique.

Note.—Du Moncel says it is an application of other instruments and invented by Breguet.

Hermann, Leonhard David. *Born June* 27, 1670, *at Massel; died May* 1, 1736, *at Massel.*

Maslographia; oder Beschreibung der schlesisch Maazel. 4to. *Brieg,* 1711

Heroart, J. F. Admiranda ethnicæ theologiæ mysteria propalata, &c. Ubi lapidem magnetem antiquissimis nationibus pro Deo cultum commonstratur. 4to. *Ingolstadii,* 1623

Note.—Attempt to prove that the properties of the loadstone were well known to the Ancients.

Herodotus. On Electron, &c. in his General History. (*From Poggendorff,* i. 1086.)

Herrmann, R. In naturali Magnetismo in chalybem inducendo quanto momento sit tempus. *Breslau,* 1863

† **Hermelin,** S. G. Über das Verhalten des Magnets in Gruben. 8vo. 4 pp. (*K. Schwed. Akad.* Abh. xxix. 329.) *Leipsig,* 1767

† **Herschel,** A. S. Detonating Meteors of February and November. 8vo. 3 pp. (*Intellectual Observer,* No. 50, p. 99.) *London,* 1866

Herschel, Sir John Frederick William, Bt. *Born March 7, 1792, at Slough, near Windsor.*

Repetition of Arago's experiments on the Magnetism, &c. during the act of Rotation. 4to. (*Phil. Trans.* 1825.) *London*, 1825

Light and Sound. Also Heat, Electro-magnetism, Electricity, Galvanism, Chemistry. 4to. 34 plates. (*From Encyclop. Metropolitana.*) *London*, 1827-30

Preliminary discourse on the study of Natural Philosophy. 12mo. 1831

Letter to Arago from the Cape on Falling Stars. 8vo. (*Annales de Chimie*, 1836.) *Paris*, 1836

† A Manual of Scientific Enquiry, prepared for the use of Her Majesty's Navy, and adapted for Travellers in general. 8vo. 488 pp. 2 plates. *London*, 1849

Physical Geography from the Encyclopædia Britannica. Post 8vo. 441 pp. *London*, 1861

Terrestrial Magnetism. Article in Encyclopædia Britannica, 8th edition.

*† Art. Meteorology from Encyclopædia Britannica. Foap. 8vo. *London*, 1861

* Meteorology. From the (8th edition of the) Encyclopædia Britannica. 2nd edition. 12mo. 288 pp. 3 plates. *London*, 1862

Outlines of Astronomy. Essays from the Edinburgh and Quarterly Reviews; with Addresses and other pieces. 6th edition.

(*Vide* also Royal Society.)

Herschell and Main. Manual of Scientific Enquiry. 3rd edition. 8vo. *London*, 1864

† **Hervieu.** Essai sur l'électricité atmosphérique. . . 8vo. 266 pp. *Paris*, 1835

Hesse, Jul. Erfahrungen und Beobachtungen über die Anwendung des magneto-elektrischen Rotations-Apparats in verschiedenen Krankheiten. *New Brandenburg*, 1843

† **Hessel**, J. F. C. Versuche über Magnet-Ketten, u. ub. d. Eigenschaften d. Glieder derselben. 8vo. 301 pp. 3 plates. *Marburg*, 1844

Hessler, F. Über d. Einfluss d. materiell. Beschaffenheit d. Prisma auf d. chem. Wirk. des durch dasselbe zerlegt. Sonnenlicht. (*Baumgartner's Zeitschrift f. Physik*, iii. 1835.) *Wien*, 1835

Über einen elektromagnet. Inductions-Apparat. 8vo. (*Abhandl. d. Böhm. Gesellsch. d. Wiss. 5 Folge*, i. 1841.) *Prag*, 1841

Uber d. galvan. Kohlenzinksäule d. Prof. R. Bunsen. 8vo. (*Abhandl. d. Böhm. Gesellsch. d. Wiss. 5 Folge* ii. 1843.) *Prag*, 1843

† **Hessler and Pisko.** Lehrbuch der Technichen Physik. 3te Auflage. 2 vols. 8vo. 1373 pp. *Wien*, 1866

1 Bd. Mechanik, Akustik u. Elekt. Von J. F. Hessler.
2 Bd. Schluss d. Elek. Optik u. Wärme. Von Hessler und F. J. Pisko.

Heuffers. Manner of constructing the Pile. 8vo. (*From Sue*, iv. 233.) *Hulm.*

Heurlin, S. De actione electricitatis in corpora organica. *Lund*, 1776

Heusinger, Johann Michael. *Born Aug. 24, 1690, at Sundhausen, Gotha; died Feb. 24, 1751, at Eisenach.*

Diss. de noctiluca mercuriali. "Seu de luce quam argentum vivum in tenebris fundit." 4to. *Giessæ*, 1716

Hevelius, Johann. *Born Jan. 28, 1611, at Danzig; died Jan. 28, 1687, at Danzig.*

Letter containing an observation of the Variation of the Magnetic Needle a Danzig in the year 1670, &c. . . 4to. (*Phil. Trans.* 1670, p. 2059.) *London*, 1670

De variatione acus magneticæ. (*Opusc. Act. Erudit. Lips.* tom. i. p. 103.)

† **Hiffelsheim.** Des applications médicales de la pile de Volta. 8vo. 152 pp. *Paris*, 1861

† **Higgins, W.** Description and analysis of a Meteoric Stone which fell in the county of Tipperary, in Ireland, in the month August, 1810. 8vo. 6 pp. (*Phil. Mag.* xxxviii. 262.) *London*, 1811

† Experiments and observations on the Atomic Theory and Electrical Phenomena. 8vo. 180 pp. *London*, 1814

† **Higgins, W. M.** Alphabet of Electricity. 16mo. 113 pp. *London*, 1834

† **Highton, E.** The Electric Telegraph; its history and progress. 12mo. 179 pp. *London*, 1852

Reports on Telegraphic Wires. Fol. *London*, 1856-8

Consideration of the probability of the success of the Atlantic Telegraph Cable. 8vo. *London*, 1857

† **Highton, Henry and Edward.** Specification of the Patent for improvements in Electric Telegraphs. Sealed Jan. 25, 1848. 8vo. 37 pp. 3 plates. *London*, 1849

Hildebrand (or "A. H."). Schreiben eines Geistlichen zu Wien an einen seiner Freunde zu Presburg, von dem immerwährenden Elektrophor; aus dem Französischen mit Anmerk. überst. *Wien*, 1776

(*Note.—Socin says that Jacquet is the author of the original French work and Hildebrand the* ("A. H.") *translator as above.*)

Hildebrandt, Georg Friedrich. *Born June 5, 1764, at Hanover; died March 25, 1816, at Erlangen.*

Galvan Wasserzersetz-Apparat. 8vo. (*Gilbert, Ann.* xxi. 1805.) *Leipzig*, 1805

Volta'sche Säule aus drei Metallen. 8vo. (*Gilbert's Ann.* xxx. 1808.) *Leipzig*, 1808

Über d. Unabhängigkeit d. Erregung d. Galvanismus v. d. Unterschiede d. Oxidabilität d. Erreger. 8vo. (*Gehlen's Nec. Journ.* vi. 1808.) 1808

Über d. Unterschied d. Lichts beider Electricitäten in verdünnter Luft. 8vo. (*Schweigger's Journ.* i. 1811.) 8vo. *Nürnberg*, 1811

Über d. verschieden. Wirksamk. verschiedener Metalle in Erzeug d. elektr. Spitzenlichts. 8vo. (*Schweigger's Journ.* xi. 1814.) *Nürnberg*, 1814

† **Hill, John.** Letter to Tilloch, on Cuthbertson's and on Brooke's modes of increasing the charge of Electrical Jars and Batteries. 8vo. 2 pp. (*Phil. Mag.* xxxvii. 79.) *London*, 1811

† **Hill, Rowland.** Improvement in the method of forming Electrical Planispheres. 8vo. 2 pp. (*Phil. Mag.* lii. 293.) *London*, 1818

Hilliard, Jno. Fire from Heaven: concerning a man burnt to ashes by Lightning. 4to. (*From Watts.*) *London*, 1613

Hinrichs, G. Die elektromagnetische Telegraphie, sammt den nöthigen Kenntnissen aus der Physik leichtfasslich wissenschaftlich dargestellt. 8vo. 2 plates. Map. *Hamburg*, 1856

Hintler, A. Meteora, seu corpora sublimia physicæ considerationi subjecta. 4to. *Salisburgum*, 1758

Hiorter. (*Vide* Celsius and Hiorter.)

Hipp. Notice sur les horloges électriques et particulière sur celles établies à Genève en 1861. *Neuchatel*, 1864

Télégraphe autographique. (*From Du Moncel.*

"Der Hipp'sche Schreibapparat ohne Relais." (*From Kuhn.*)

Copirtelegraphen. (*Kuhn, p.* 1007, *gives no account of the source of quotation, but an account of the thing itself.*)

Invented or described several apparatus, as alluded to by Du Moncel, Kuhn, &c. but I can find no references to their sources of information. He obtained a Medal at the Exposition of 1853.

(*Vide* also Hartmann, Description du télégraphe de M. Hipp.)

Hire. (*Vide* La Hire, Dc.)

Hirt. Der Tempel Salomonis. 4to. (*From Martin*, p. 307.) *Berlin*, 1803

Hisinger, W. *Born Dec.* 22, 1766, *at Elfstorps, Bruk; died June* 28, 1852, *at Skinskattiberg.* (*Poggendorff*, i. 1112.)

Forsok med elektriska stapelns verkan på. Djur-och Växtämmen (Dl. i.) (*Afhandl. i Fisik. Kemi och Mineralogi*, Dl. i.) (*Quere: Is this a* 1*st part, or vol.?*) *Stockholm*

Untersokn af benzo ësyrade salters forhallende till jordarter och metalloxider. (*Afhandl. i Fisik, Kemi och Mineralogi*, Dl. iii.) *Stockholm*, 180—

Hisinger and Berzilius. Forsok med. elektr. stapelns verkan på salter, &c. 8vo. (*Afhandl. i Fisik, Kemi och Mineralogi*, Dl. i.) *Stockholm*, 1806 ?

Poggendorff says that Hisinger published many articles in this periodical between 1806 *to* 1818.

Hisinger and Gahn. Forsok att med. elektriska gnistor från en vanlig Elektricitets-machin sonderdela vatten. (*Afhandl. i Fisik, Kemi och Mineralogi*, Dl. i.) *Stockholm*, 1806

(*Vide* also Berzelius and Hisinger.)

† **Hittorf, W.** De joutum migrationibus electrolyticis. Pars prima. Comment. Chem. Phis. 4to. 20 pp. 1 plate (lith.) *Monasterii Guestphalorum*, 1853

† **Hjortberg, G. F.** Sechsjährige Versuche mit der Elektricität an unterschiedlichen Kranken. 8vo. 11 pp. (*K. Schwed. Akad.* Abh. xxvii. 200.) *Leipzig*, 1765

† Beschreibung und Abzeichnung der Werkzeuge die bey Anwendung der Elektricität auf Kranke mit Nutzen sind gebraucht worden von G. F. H. 8vo. 7 pp. 1 plate. (*K. Schwed. Akad.* Abh. xxvii. 280.) *Leipzig*, 1765

† Auszug aus des . . G. F. Hiortbergs Tagebuche über die von ihm 1766 angestellten Versuche, die Elektricität gegen allerley Krankheiten zu brauchen. 8vo. 4 pp. (*K. Schwed. Akad.* Abh. xxx. 99.) *Leipzig*, 1768

Hjorter, Olof Peter. *Born* 1696, *at Jämtland; died April* 25, 1750, *at Upsala.*

Om magnetnälens atskilliger ändringer, som af framl. Prof. Andr. Celsius blifvit jaktagne och sedan vidare observerade. (*Vetensk. Akad. Handl.* 1747.) 1747

† Von der Magnet-Nadel mannichfaltigen Veränderungen, welche durch den verstorbenen A. Celsius sind in Acht genommen und nachgehends weiter beobachtet worden. 8vo. 16 pp. (*Schwedische Akad. Abhandl. A.* 1747, p. 30, vol. ix.) *Hamburg*, 1747

Note.—*Van Swinden* (iii. 239), *refers to Hiorter's suspicion relative to Bars magnetized during an Aurora, &c., and quotes Hiorter in other places on other subjects.*

† **Hoadly, Benjamin.** *Born February* 10, 1705, *at London; died August* 10, 1757, *at Chelsea.*

Hoadley and Wilson. Observations on a Series of Electrical Experiments by Dr. Hoadley and Mr. Wilson. 4to. 76 pp. *London*, 1758

Betrachtungen über eine Reihe elektrischer Versuche. *Leipzig*, 1763

Betrachtungen über eine Reihe von Versuchen; nach der 2n von Wilson verbesserten . . Ausgabe; a. d. Engl. 8vo. (*From Saxtorf*, ii. 509.) *Leipzig*, 1763

† **Hodgson, J.** A Method of correcting the variation of the Mariner's Compass. 8vo. 4 pp. 1 plate. (*Phil. Mag.* xxxix. 370.) *London*, 1812

Hofmann, B. Einladungs schrift de moralitate circa electricitatis experimenta, præsertim fulmina. Folio. *Mersberg*, 1754

Hoffmann, Johann Christian. *Born* 1768, *at Schlettau, near Lauchstadt.*

Praktische. . . Anleitung. . . Elektrisermachinen zu bauen. 8vo. *Leipzig*, 1795

Anweisung gute Elektrisirmaschinen zu bauen, &c. *Leipzig*, 1798

† **Hoffmann,** Johann Christian—*continued.*

Anviisning til ved Hjælp af den galvaniske Kobberudskilning at mangfoldiggiöre en med Pen eller Ridfefjeder udfort Skrift eller Tegning. 8vo. 22 pp. 1 plate. *Kjobenhavn*, 1842

† Anweisung zum Vervielfältigen mit der Feder oder Reissfeder, durch Hülfe der galvanischen Kupferausscheidung. 8vo. 22 pp. 1 plate. *Kopenhagen*, 1842

Hoffmann, J. J. Igna. Beschreibung eines sehr einfachen u. sehr wirksamen. Papier-Elektrophors. *Aschaffenb.* 1847

Hoffman. (*Vide* Buff, H. 1851.)

† **Hogstrom,** P. Anmerkung über die Thiere die aus den Wolken kommen. 8vo. *Hamburg*, 1749

Holger. (*Vide* Baumgartner.)

Höll. (*Vide* Hel.

Holland, Sir Henry, Bart. Essays on Scientific and other Subjects contributed to the *Edinburgh and Quarterly Reviews.* *London*, 1862

Hollandsche Maatschappij voor Wetenschappen. A Society similar to the Smithsonian Institute at Washington, for the purpose of exchanging the publications and periodicals of the Learned Societies.

† **Hollick,** F. Neuropathy. . . An explanation of the action of Galvanism, Electricity, and Magnetism in the cure of Disease. 12mo. 193 pp. *Philadelphia*, 1847

Hollis. On Electricity and Magnetism. 8vo. (*From Reorback, Bibl. Amer of* 1852.)

Hollmann, Samuel Christian. *Born December* 3, 1696, *at Stettin; died September* 4, 1787, *at Göttingen.*

† Epistola (ad Mortimerum Sec. R. S.) de subitanea congelatione, de igne electrico, &c. Read Jan. 10, 1744-5. 4to. 10 pp. (*Phil. Trans.* xliii. 239.) *London*, 1744-5

Of Electrical Fire. (*Phil. Trans.* x. 271.) 1744-5

† De Barometrorum cum Aëris et Tempestatum mutationibus consensu. Read April 23, 1749. 4to. 10 pp. (*Phil. Trans.* xlvi. p. 101.) *London*, 1749-50

Holm, P. Stuurmans rechtwyzende compas. *Amsterdam*

† **Holmes.** Magneto-electric Light as applicable to Lighthouses. 8vo. 34 pp. 1 plate. *London*, 1862

† **Holmgren,** K. A. Recherches relatives à l'influence de la température sur le Magnétisme. 4to. 20 pp. (*Ups. Acad.* 1855.) *Upsala*, 1855

Recherches sur l'influence de la température sur le Magnétisme. 4to. 2 plates. (*Ups. Acad.* 1859.) *Upsala*, 1859

† Rön angaande Magnetismus inverken på Warmeledningen hos fasta kroppar. 8vo. 27 pp. (*Akademisk Afhandling.*) *Stockholm*, 1861

Holsbeek, H. van. Appareil électro-galvanique de M. O'Connell. 8vo. 1 plate. *Bruxelles*, 1859

† Compendium d'électricité médicale. 2e édition, . . augmentée, &c. 8vo. 680 pp. *Bruxelles et Paris*, 1861

† (*Vide* also Annales de l'Electricité Médicale.) 8vo.

† **Holtz,** —. An Electrical Machine formed on the principle of Influence. 1864

† **Holzmann,** C. H. A. Mechan. Arbeit, erforderlich z. Erhalt. e. elektr. Stroms. 8vo. (*Poggendorff's Ann.* xci. 1854.) *Leipzig*, 1854

Über d. Polarisat. e. elektr. Stroms. 8vo. (*Poggendorff, Ann.* xcii. 1854.) *Leipzig*, 1854

Holzmann, M. Praktisch-elektrische Versuche und Aufschlüsse aus geprüften Erfahrungen . . 8vo. 72 pp. 1 plate. *Ingolstadt*, 1837

Holzmuller, G. Über die Anwendung der Jacobi-Hamilton'schen Methode auf den Fall der Anziehung nach dem elektrodynamischen Gesetz von Weber. Hallische Inaugural-Dissert. 8vo. 23 pp. *Halle*, 1870

Hombre-Firmas. (*Vide* D'Hombre-Firmas, p. 138.)

† **Home, Everard.** Hints on the subject of Animal Secretions. From Phil. Trans. for 1809, part ii. Communicated by the Society for the improvement of Animal Chemistry. 8vo. 6 pp. (*Phil. Mag.* xxxv. 108.) *London*, 1810

Homer, Odyss. xx. 139.
Note.—Lightning without audible thunder. (*From Young*, p. 483.)

Hompeck, Anton. *Died after* 1770, *at Vienna.*

Abhandl. v. d. elekirisn. Abstossung. 8vo. (*From Krunitz*, p. 69.) *Wien*, 1765

Hooke, Dr. Robert. *Born July* 18, 1635, *at Freshwater, Isle of Wight; died March* 3, 1703, *at London.*

Variation (Magnetic). (*From Churchman.*) 1674

His Optical Telegraph. (*Vide Poggendorff*, i. 1138, *and* 420 *C. Chappe. Vide also Böckmann, J. L., Über Telegraphie, &c., Carlsruhe*, 1794. *Hooke's Telegraph was made known (by him) long before Claude Chappe's.*) 1684

Posthumous Works of, containing his Cutlerian lectures, and other philosophical discourses (concerning) an hypothetical explication of . . Magnetism, &c. His Life prefixed. Folio. *London*, 1705

Hopkins. On the connexion of Geology with terrestrial Magnetism. 8vo. 24 plates. *London*, 1844

† **Hopkins, Evan.** Notice sur la dépolarisation des Navires de fer, par M. Evan Hopkins. . . Traduit de l'anglais par F. A. B. Craufurd. 8vo. 17 pp. 1 plate. *Paris*, 1867

Hopkinson. (*Vide* Rittenhouse and Hopkinson.)

Hopkinson, Thos. *Born April*, 1709, *at London; died* 1751, *at Philadelphia.*

On the effects of Points in Electricity. (*Vide Franklin*, 1754.)

† **Hoppe, Martin.** Über das Gewitter. 4to. 18 pp. (*Program des Fürstlich. Hedwigschen Gymnasium, in Neustettin . .* 10 *und* 11 *April* 1865). *Neustettin*, 1865

Horace. Od. i. 34.
Note.—Lightning without audible thunder. (*From Young*, p. 483.)

Horbye. Sur les phénomènes d'Erosion en Norvège. (*Atti. I. R. Inst. Lomb.* i. 125.) *Christiania*, 1857

Horing. Beobachtungen über Heilwirkungen der Electricität bei Anwendung des magnet-electr. Rotations-Apparates. (*Würtembergisches Correspondens-blatt*, 1846, No. 28, 29.) 1846

† **Horion.** De phænomenis electro-chimicis. 4to. 58 pp. 1 plate. 1829

Horn, H. Das Wirken der Elektricität in den Organismen. 12 Heft. 8vo. 44 pp. *München*, 1867

Horneman. (*Vide* Œrsted and others.)

Horner. Erste Hälfte des Art. Magnetismus des neuen Gehln. Wörterb. 1825 *to* 1845 ?
Note.—He also wrote the Articles "Ablenkung d. Magnetnadel," "Abweichung d. Magnetnadel."

Horner, Johann Kaspar. *Born March* 21, 1774, *at Zurich; died Nov.* 3, 1834, *at Zurich.*

Bemerkung über Blitzableiter u.s.w. *Zürich*, 1816

Über Wasserhosen u. Erdtromben. 8vo. (*Gilbert's Ann.* lxxiii. 1823.) *Leipzig*, 1823

Verbesserung d. Schmalkalderschen Bussole. 8vo. (*Gilbert's Ann.* lxxv. 1823.) *Leipzig*, 1823

Hornes, M. Ueber den Meteorsteinfall bei Ohaba im Blasendorfer Bezirke in Siebenbürgen, in der Nacht zwischen dem 10 u. 11 October, 1857. 8vo. 8 pp. (*Aus den Sitzungsberichten 1858 der mathem. naturw. Classe der kais. Akad. der Wissenschaften.*) *Wien*, 1858

Horsburgh, James. *Born September 23, 1762, at Elie, Fifeshire, Scotland; died May 14, 1836, at Herne Hill, near London.*

* Atmospheric Register for indicating Storms at sea. Fol. oblong. *London*, 1816

† Compendium . . . of Winds . . . Luminous Appearance . . . of the Sea. Magnetism, &c. . . . 8vo. 52 pp. *London*, 1817

† On the Insulated or Safety Compass lately invented by Mr. Jennings. 8vo. 3 pp. (*Phil. Mag.* liii. 365.) *London*, 1819

† **Hortentz, A. B.** On production of Muriates by the Galvanic Decomposition of Water. 8vo. 1 page. (*Phil. Mag.* xxiv. 91.) *London*, 1806

Hough, G. W. The Galvanic Battery. (*Monot. Anzeig.* 1870, p. 100.) *Albany*

† **Houink, J.** Diss. Phys. de theoria elementi apparatus voltaici. 8vo. 189 pp. *Groningæ*, 1835

† **House, R. E.** History of the Invention of the Electric Telegraph. Abridged from the works of L. Turnbull and E. Highton, with remarks on R. E. House's American Printing Telegraph and the claims of S. F. B. Morse as an inventor. 12mo. 130 pp. *New York*, 1853

† **Houzeau, J. C.** Sur les étoiles filantes périodiques du mois d'aout, et, en particulier, sur leur apparition de 1842. Présenté 3 Aout, 1844. 4to. 54 pp. (*Mem. sav. étrang. Acad. Bruz.* xviii. 1845.) *Bruxelles*, 1845

Howard, E. Copernicans convicted, &c. 8vo. (*From Watt.*) *London*, 1705

Howard, Luke. *Born November 28, 1772, at London.*

*† On the Modifications of Clouds, and on the principles of their Production, Suspension, and Destruction, being the substance of an Essay read before the Askesian Society in the Session 1802-3. 11, 14, and 7 pp. (*Phil. Mag.* vol. xvi. pp. 97 and 344; and vol. xvii. p. 5), 3 plates, 7 figs. *London*, 1803

*† On the best means for conducting Meteorological Observations in different Places and Climates, so as to produce some uniformity in the modes of obtaining and summing up the results. 8vo. 4 pp. (*Phil. Mag.* lvii. 81.) *London*, 1821

* Essay on the Modifications of Clouds. 8vo. *London*, 1832

*† Seven Lectures on Meteorology. 2nd edition revised. 12mo. 218 pp. *London*, 1843

† **Howldy, T.** Influence of Atmospheric Moisture on an Electric Column composed of discs of zinc and silver. 8vo. 5 pp. (*Phil. Mag.* xliii. 241.) *London*, 1814

† Influence of Atmospheric Moisture on an Electric Column composed of discs of zinc and silver. 8vo. 2 pp. (*Phil. Mag.* xliii. 363.) *London*, 1814

† On the Franklinian Theory of the Leyden Jar, &c.; with remarks on Mr. Donovan's Experiments. 8vo. 8 pp. (*Phil. Mag.* xlvi. 401.) *London*, 1815

† On certain Electrical Phenomena. 8vo. 8 pp. (*Phil. Mag.* xlvii. 285.) *London*, 1816

† Remarks on Mr. Sturgeon's Paper "On the Inflammation of Gunpowder by Electricity." 8vo. 3 pp. (*Phil Mag. or Annals*, i. 343.) *London*, 1827

† **Hoxton, Walter.** An account of an unusual agitation in the Magnetical Needle, observed to last for some time, in a voyage from Maryland, by Hoxton, W., communicated in a letter to Papillon, D. Dated September 2, 1724. 4to. 2 pp. (*Phil. Trans.* xxxvii. 53.) *London*, 1731-32

† The Variation of the Magnetic Needle as observed in three voyages from London to Maryland. 4to. 5 pp. (*Phil. Trans.* xli. 171.) *London*, 1739-40-41

Hoy, James. On the height of the Aurora Borealis from the Earth. 8vo. (*Tillock's Phil. Mag.* li. 422.) *London*, 1818

Huart. (*Vide* Colmet-d'Huart.)

Hube, Mich. Über die Ausdünstung und ihre Wirkungen in der Atmosphäre. 8vo. *Leipsig*, 1790

† Huber, Joh. Jac. De aëre atque electro-œconomiæ animali famulantibus et imperantibus cogitationes tumultuariæ, quas demonstrationibus anatomicis præmittit. 4to. 52 pp. *Casselis*, 1747

Hubner, J. G. Gedanken v. d. Magnetnadel. 8vo. *Halle*, 1772

† Hubner, L. Abhandlung über die Analogie der elektrischen und magnetischen Kraft. 4to. 34 pp. (*Neue Abh. der Baier, Akad. Philos.* ii. 351.) 1780

Hues, Robert. *Born about* 1553, *at Harford; died May* 24, 1632.

On Magnetic Variations. (*From Gilbert*, p. 7.)

Hufeland, C. W. Diss. sistens usum vis electricæ in asphyxia experimentis illustratum. 4to. *Gottingæ*, 1783

Journal de Médecine pratique. 8vo. *Berlin*

Journal d. pract. A. K.

(*Note.—Contains Quesnel, Galvanische Versuche*, vol. xiii. 4 s. St. s. 130.)

† Hughes, David Edward. Expériences sur la forme et la nature des électro-aimants. 8vo. 11 pp. 3 plates. (*Annales Télégraph.* 1864.) *Paris*, 1864

† Le télégraphe imprimeur. 1871

† Hugueny, C. A. Nouvelles considérations sur les agens généraux moteurs de l'action universelle. 8vo. 1 plate. 73 pp. *Strasbourg*, 1834

Considérations générales, &c. 3me étude. 8vo. 51 pp. *Strasbourg*, 1842

† Hulme, N. Experiments and observations on the Light which is spontaneously emitted, with some degree of permanency, from various bodies. 4to. (*Phil. Trans.* 1800, part i. p. 161.) *London*, 1800

(*Note.—This is one of many articles in Rouse's Repertorium*, vol. iv. p. 252 *et seq. on Light which should be considered or examined in reference to Electricity.*)

A continuation of the experiments and observations of the Light which is spontaneously emitted from various bodies; with some experiments and observations on Solar Light when imbibed by Canton's phosphorus. 4to. (*Phil. Trans.* 1801, p. 403.) *London*, 1801

Humboldt. Friedrich Heinrich Alexander (Freiherr von). *Born Sept.* 14, 1769, *at Berlin.*

Aphorismi ex doctrina physiologiæ chimicæ plantarum: Anhang zu Floræ Fribergensis specimen, &c. *Berol*, 1793

(*Note.—Aphorismi "Deutsch von Fischer mit Zusätzen von Hedwig und Ludwig. Leipzig*, 1795.)

† Versuche über die gereizte Muskel und Nervenfaser: nebst, Vermuthungen über den chemischen Process des Lebens in der Thier u. Pflanzen welt. 8vo. 2 vols. *Posen u. Berlin*, 1797

† Expériences sur le Galvanisme et, en général, sur l'irritatiou des fibres musculaires et nerveuses. Trad. de l'Allem. avec additions par Jadelot. 8vo. 530 pp. 8 plates. *Paris*, 1799

Inclinaisons et déclinaisons de l'aiguille aimantée observées depuis Vendémiaire jusqu'en Germinal An. 7 à Paris, Nimes, Montpellier, Perpignan, Gironne, Barcelone, Cambrils, Madrid, Valence, Medina del Campo, Guaderama, Ferol, Océan Atlantique entre l'Europe, l'Amérique et l'Afrique. (*Société Philomath.* An. 7. p. 27.) *Paris*, 1797

Humboldt, Friedrich Heinrich Alexander—*continued.*

Lettre de M. Humboldt à M. Loder sur l'application du Galvanisme à la médecine pratique. (*La Bibliothèque Germanique*, iv. Messidor, An. viii. p. 301.) 1800

Observations de Zoologie, &c. 4to. *Paris*

Versuche, Muskel und Nervenfaser. 2 vols. 8vo. *Posen and Berlin*, 1797 & 1799

Über d. merkwürd. magnet. Polarität einer Gebirgskuppe von Serpentinstein. 8vo. (*Gren. Neu Journ.* iv. 1797.) *Leipsig*, 1797

Versuche ü. d. chem. Zerleg. d. Luftkreises. 8vo. *Braucher*, 1799

Über d. unterirdischen Gasarten, &c. 8vo. 2 plates. *Braucher*, 1799

† Lettera su una pietra serpentina verde dotata d'una fortissima polarità magnetica. 4to. 1 page. (*Opusc. Scelti*, xxi. 126, *from Ann. de Chimie*, xxii.) *Milano*, 1801

Versuche üb. d. electrischen Fische. 8vo. *Jena*, 1806

† Observations sur l'Anguille électrique (Gymnotus electricus, *Linn.*) du nouveau continent. 4to. 44 pp. 1 plate. (*Many quotations.*) *Paris*, 1806

Ansichten d. Natur. 2 Bde. 12mo. *Tübingen*, 1808

Sur l'électricité animale. 4to. (*Soc. Philomath.* tom. i. p. 92.) *Paris*

Physique générale et relation historique. 4to. *Paris*, 1811-25

Sur les poissons électriques. 8vo. (*Ann. Chim. Phys.* xi. 1819.) *Paris*, 1819

Ansichten d. Natur, mit wissenschaftl. Erläuterungen. 2 Bde. 2te. Ausg. 16mo. *Stuttgart*, 1826

Beob. d. magnet. Intensität u. Inclinat. auf d. Reise nach u. in Amerika. 8vo. (*Pogg. Ann.* xv. 1829.) *Leipsig*, 1829

Mittel um die Egründ. einig. Phänomene d. tellurisch. Magnetism zu erleichteren. 8vo. (*Pogg. Ann.* xv.) *Leipsig*, 1829

† Sur le Magnétisme polaire d'une montagne de Chlorite schisteuse et de Serpentine. Lettre à Becquerel. 8vo. 7 pp. *Paris*, 182-?

Fragmen. de géologie et de climatologie Asiatiques. 2 vols. 8vo. *Paris*, 1831

Über einige elektromagnet Erscheinungen u. d. verminderten Luftdruck unter den Tropen. 8vo. (*Pogg. Ann.* xxxvii. 1836.) *Leipsig*, 1836

Asie centrale, Recherches sur les chaines de Montagnes et la Climatologie comparée. 3 vols. 8vo. *Paris*, 1843

Central-Asien. Untersuchungen über die Gebirgsketten und die vergleichende Klimatologie. 2 vols. and map. *Berlin*, 1844

Cosmos, Entwurf einer physischen Weltbeschreibung. 4 vols. 8vo. *Stuttgart u. Tubingen*, 1845

Aspects of Nature, translated by Mrs. Sabine. 2 vols. square. *London*, 1848

Ansichten der Natur, mit wissenschaftl. Erläuterungen. 2 vols. 3rd edition. Verb und verm ausg. 8vo. *Stuttgart*, 1849

Cosmos, translated by Mrs. Sabine. 4 vols. 8vo. *London*, 1849-58

Alexander von Humboldt ein biographisches Denkmal von Prof. Dr. H. Klencke. 8vo. 252 pp. 1 plate. *Leipsig*, 1851

Cosmos. Essai d'une description physique du monde, traduit par Ch. Galuski. 4 vols. 8vo. *Paris*, 1848-59

Kleinere Schriften. Vol i. Geognostische u. physikalische Erinnerungen. 8vo. *Stuttgart*, 1853

Atlas to the same. Umrisse von Vulkanen. 12 plates 4to. *Stuttgart*, 1853

† Atlas to Humboldt's Kosmos. 42 maps of physical geography, &c., by T. Bromme. Fol. *Stuttgart*, 1854

Humboldt, Friedrich Heinrich Alexander—*continued.*

Briefe über Humboldt's Kosmos. Ein Commentar für gebildete Laien. 4 vols. 8vo. *Leipzig*, 1855-60

Reise in die Aequinoctialgegenden des neuen Continents. 4 vols. 8vo. *Stuttgart*, 1859-60

Alexander von Humboldt, sein wissenschaftliches Leben und Wirken . . von Wittwer. 8vo. 440 pp. Portrait and autograph. *Leipsig*, 1861

Personal Narrative, by Williams. 8vo. *London*

(*Note.*—*In* vol. iii. *he gives an account of atmospheric phenomena witnessed at Cumana . . by Bonpland on the 12th Nov.* 1799, *viz. thousands of bolides* (*fire-balls*) *and falling stars succeeded each other during four hours*) . . (*Vide Phil. Mag.* lii. 312.)

Kosmos oder physische Erdbeschreibung. 5 vols. 8vo.

Commentar über Humboldt's Kosmos von Cotta und Schaller. 4to. 8vo.

Umrisse von Vulkanen aus den Cordilleren von Quito und Mexiko. 4to. pls.

† Portrait. Lithograph by Boorbach (of Berlin) from a photograph.

Gedächtnissrede auf. (*From Dove.*) 1869

† **Humboldt und Biot.** On the variations of the terrestrial magnetism in different latitudes. By Messrs. Humboldt and Biot. Read by M. Biot in the French National Institute, 26th Frimaire, An. 13 (17th December, 1804). 8vo. 10 pp. (*Phil. Mag.* xxii. 248, 249.) *London*, 1815

Humboldt und Bonpland. Untersuchungen über die Geographie des neuen Continents, bearbeitet von Oltmanns. 2 vols. 8vo. *Paris*, 1810

Voyage dans l'intérieur de l'Amérique méridionale fait en 1799-1804. In d. grossen Aufl. 17 vols. fol. u. 11 vols. 4to. Part i. Physique générale et relation historique. 3 vols. 4to. Paris, 1811-25, oder 13 vols. 8vo., 1816-31. Part ii. Zoologie, &c.

† **Humboldt and Gay-Lussac.** Experiments on the Torpedo, by Messrs. Humboldt and Gay-Lussac. Extracted from a letter from M. Humboldt to M. Berthollet, dated Rome, 15 Fructid. Year 13. 8vo. 5 pp. (*From Ann. de Chim.* No. 166.) (*Phil. Mag.* xxiii. 356.) *London*, 1806

(*Vide* also Gay-Lussac.)

Observations sur l'intensité et l'inclinaison des forces magnétiques faites en France, en Suisse, en Italie, et en Allemagne; avec Gay-Lussac. 8vo. (*Mémoires d'Arcueil*, i. 1807.) *Paris*, 1807

(*Vide* also Bétancourt.)

Hume, A. The learned Societies and Printing Clubs of the United Kingdom, with a Supplement by A. J. Evans. 12mo. *London*, 1853

Hume, G. L. Essay on Chemical Attraction. 8vo. *London*, 1836

Humphreys, J. D. The Electro-Physiology of Man, with practical illustrations, &c. 12mo. *London*, 1843

Hunt, R. Atlantic Telegraphy. 8vo. (*Popular Science Review*, No. 17, 1866.) *London*, 1866

(*Note.*—*This number contains also* "*The Applications of Photography.*")

Hunt. (*Vide* Walker and Hunt.)

Hunter, John. *Born Feb.* 13, 1728, *at Kilbride, Lanarkshire; died Oct.* 16, 1792, *at London.*

On the numerous Nerves, &c., of the Electric Organs of the Torpedo. 4to. (*Phil. Trans.*) *London*, 1773-1775

Anatomical observations on the Torpedo. 4to. (*Phil. Trans.* 1773.) *London*, 1773

An account of the Gymnotus Electricus. 4to. (*Phil. Trans.* 1775.) *London*, 1775

First perceived the Galvanic sensation of Light in the experiment on the Eyes. (*Opusculi Scelti*, xxii. 364.)

(*Note.*—*Becquerel makes the mistake of saying that Sulzer saw this light.*)

Hupsch. Untersuchung des Nordlichts. 8vo. (*Opusc. Scelti* (*in* 4to.) tom. ii. p. 14.) *Cologne*, 1778

Hunter. (*Vide* Euler, L.)

Hutchins, Thomas. *Born* 1730 (*about*), *at Monmouth County, New Jersey; died April* 20, 1788.

Experiments on the Dipping Needle, made by desire of the Royal Society. 4to (*Phil. Trans.* 1775, p. 129.) *London*, 1775

Huth, J. G. Über die chemische und elektrische Wirkungs-Weite einer Voltaischen Säule. (*Neue Schr. die Berliner Gesellsch. Natur Freunde*, iv. 161, 1803) *Berlin*, 1803

Expériences et observations sur l'électricité galvanique; distance à laquelle la pile exerce son action. 8vo. (*Journ. d. Chim. de Van Mons, No.* vi. p. 289.) *Bruxelles*

† Hutton, C. On the Origin of Stones that have fallen from the Atmosphere. 8vo. 9 pp. (*Phil. Mag.* xxii. 71.) *London*, 1805

† Huxham, John. A Letter from J. Huxham to C. Mortimer containing observations on the Northern Lights seen Feb. 16 and 16, 1749-50. Read June 21, 1750. 4to. 2 pp. 1 part of a plate. (*Phil. Trans.* xlvi. 472.) *London*, 1749-50

I.

Iconographic Encyclopædia of Science. 4 vols. 8vo., and 2 vols. 4to. of plates. *New York*, 1852

(*Note.—Trübner says, "systematically arranged by G. Heck, 500 sq. plates by Germans. Text translated by Baird."*)

† **Ideler, J. L.** Über d. Ursprung d. Feuerkugeln u. d. Nordlichts. 98 pp. *Berlin*, 1832

† Meteorologia veterum Græcorum et Romanorum. 8vo. 31 pp. *Berolini*, 1832

Untersuchungen über den Hagel, und die elektrischen Erscheinungen in unserer Atmosphäre. 8vo. (*Poggendorff's Ann.* xxvi. 1832.) *Leipzig*, 1832

† Untersuchungen über den Hagel und die elektrischen Erscheinungen in unserer Atmosphäre. Nebst einem Anhange . . 8vo. 1 plate, 148 pp. (*Poggendorff's Ann.* xxvii. 1833.) *Leipzig*, 1833

Aristotelis meteorologicorum, libri iv. 8vo. 2 vols. *Leipzig*, 1834-36

Imhof, Maximus. *Born July 26, 1758, at Reisbach; died April 11, 1817, at Munich.*

Theoria electricitatis recentioribus experimentis stabilita . . 8vo. 123 pp. *Haydhusii*, 1790

Was hat die heutige Arzneykunde seit einem halben Jahre in Rücksicht einer Zweckmässigen Anwendung d. Elektricität auf Kranke gewonnen? 4to. *München*, 1796

Analyse zweier baierisch. Meteorsteine. 8vo. (*Gilb. Ann.* xviii. 1804.) *Leipzig*, 1804

† Über das Schiessen gegen heranziehende Donner- und Hagel-Gewitter. (*Read 28th March*, 1811.) 4to. 24 pp. *München*, 1811

Theoretisch prakt. Anweisung zur Anlegung der Blitzableitern. 8vo. *München*, 1816

Imperial Dictionary, English, Technological, and Scientific. Adapted to the Present State of Literature, Science, and Art. Upwards of 2,500 engravings on wood. 2 vols. imperial 8vo. (*From "Athenæum," March* 4, 1872.)

Indian (East) Telegraphs. (*Vide* O'Shaughnessy.)

Ingalls, T. On the Luminous appearance of the Ocean. 8vo. (*Trans. of the Albany Institute*, i. 8.) *Albany, U.S.*, 1831

Ingenhousz, Jan. *Born Dec. 8, 1730, at Breda, Holland; died Sept. 7, 1799, at Bowood, near London* (?).

Experiments on the Torpedo. 4to. (*Phil. Trans.* 1775.) *London*, 1775

Versuche mit Pflanzen. (Vol. i.) 2 vols. 8vo. *Vienna*, 1778

A ready way of lighting a candle by a very moderate Electrical Spark. 4to. (*Phil. Trans.* An. 1778, p. 1022.) *London*, 1778

Electrical experiments to explain how far the phenomena of the Electrophorous may be accounted for by Dr. Franklin's theory of Positive and Negative Electricity. 4to. (*Phil. Trans.* An. 1778, p. 1049.) *London*, 1778

Improvements in Electricity. 4to. (*Phil. Trans.* 1779.) *London*, 1779

On some new methods of suspending Magnetic Needles. 4to. (*Phil. Trans.* An. 1779, p. 537.) *London*, 1779

Experiments upon Vegetables . . 8vo. (*From Cat. Roy. Soc.* p. 313.) *London*, 1779

Expériences sur les végétaux, trad. de l'Anglais (by the Author himself). 8vo. *Paris*, 1780

Sur divers mouvemens du fluide électrique. (*Journ. Phys.* xvi. 1780.) *Paris*, 1780

Anfangsgründe der Electricität aus dem Englischen mit Anmerkungen von Molitor. 8vo. 134 pp. *Wien*, 1781

Ingenhousz, Jan.—*continued.*

Vermischte Schriften physisch. med. Inhalts ; übersezt u. herausg. v. N. K. Molitor. 2 vols. 8vo. *Wien*, 1782-4

† Nouvelles expériences et observations sur divers objets de physique. 8vo. 489 pp. 5 plates. *Paris*, 1785

De l'influence de l'électricité atmosphérique sur les végétaux. 4to. (*Journ. Phys.* xxxii. 1788.) *Paris*, 1788

Effet de l'électricité sur les plantes. 4to. (*Journ. Phys.* xxxv. 1789.) *Paris*, 1789

Versuch mit Pflanzen. (*From Young*, p. 424.) 1790

Elements of Electricity. (*From Young*, p. 432.)

Physikalische Schriften. (*From Exleben*, p. 530.)

Inglefield. A new theory of the Physical Causes of Terrestrial Magnetism. 8vo *London*, 1851

† Inglis, Gavin. On the Theory of Water-spouts. 8vo. 7 pp. (*Phil. Mag.* lii. 216.) *London*, 1818

Innare. (*Vide* D'Innare.)

Innes, R. Miscellaneous Letters, &c. Aurora. 4to. *London*, 1732

† Innocenti, G. Preesistenza dell' acido muriatico e della soda nell' acqua galvanizzata. 4to. 10 pp. (*Nuove Scelta d'Opusc.* ii. 96.) *Milano*, 1807

L'Institut. Journal des Académies et Sociétés scientifiques. (*Vide* Arnault.)

Institut National. Rapport fait . . sur les exps. de Volta. 4to. *Paris*

Inventions, Patents for. (*Vide* Woodcroft.)

Inventions, Patents for. The Society of Telegraph Engineers have received from Her Majesty's Commissioners of Patents a complete collection of Specifications relating to Electricity, Magnetism, &c.

Irish Academy. (*Vide* Dublin.)

Isnard. Electrical Apparatus for blowing up Rocks under water. (*From Elice, Saggio*, 2nd ed. p. 61.)

Istituto Lombardo. Giornale dell' I. R. Istituto e Bibl. Italiana, 1841-47. 16 vols. 8vo.

Memorie dell' I. R. Istituto e Bibl. Italiana, 1843-... 4to.

Giornale dell' I. R. Istituto e Bibl. Italiana, 1847-56. 9 vols. 4to.

Atti dell' I. R. Istituto e Bibl. Italiana, 1858-... 4to.

(For each of these Collections *vide* "Lombardy I. R. Institution.")

Istituto Lombardo-Veneto. Memorie dell'I. R. Ist. Lombardo-Veneto.

Italian Society. Memorie di Matematica e Fisica della Società Italiana delle Scienze, 1782 to —. 4to. Tom. i. to vii. 1782—1794, printed at Verona; tom. viii. to xiii. 1799—1807, at Modena; tom. xiv. to xvii. 1809—1815-16, at Verona; tom. xviii. to xxv. 1820—1854, at Modena.

Italy. (*Vide* Accademia Italiana.)

Itier. Electro-plastic. (*From Congrès . . de France, 9me Sess. à Lyon*, i. 421.) 1841

*† Ivory, J. On the Hygrometer by Evaporation. 8vo. 8 pp. (*Phil. Mag.* lx. 81.) *London*, 1822

Izarn, Guiseppe. *Born Jan.* 10, 1766, *at Cahors, Dép. Lot ; still living*, 1834 (St.F.)

† Des pierres tombées du ciel. Lithologie atmosphérique, présentant la marche et l'état actuel de la Science sur le phénomène des pierres de foudre, pluies de pierres, pierres tombées du ciel, &c., plusieurs observations inédites, communiquées par MM. Pictet, Sage, Darcet, et Vanquelin ; avec un Essai de théorie sur la formation de ces pierres. 8vo. 421 pp. *Paris*, 1803

Lettre a M. de la Métherie sur l'effet galvanique des disques métalliques oxidés. 4to. (*Journ. de Phys.* An. xi. p. 157). *Paris*, 1803

Manuel du Galvanisme . . 1805. 8vo. 304 pp. 6 plates. *Paris*, 1805

† Manuale del Galvanismo adattato alla fisica, alla chimica, e alla medicina, tradotto dal Francese. 8vo. 206 pp. 6 plates. *Firenze*, 1805

J.

J., P. N. (*Vide* Anon. Meteorolog. Phen. Aerolites.) 1814

† **Jackson.** Description of a Galvanic Battery on an improved construction, invented by Mr. Jackson; communicated by James Miller, M.D. 8vo. 5 pp. (*Phil. Mag.* xli. 308.) *London*, 1813

Jackson, Charles Thomas. *Born June* 21, 1805, *at Plymouth, Massachusetts.*

Réclamation de priorité relative à l'invention d'un télégraphe électro magnétique attribué a M. Morse. 4to. *Paris*

Electro-magnetic Telegraph. (*Boston Post, Jan.* 1849.) *Boston, U.S.* 1849
(*Note.— He claims the invention of it.*)

† **Jacobæus,** H. W. Du mouvement imprimé à l'aiguille aimantée par l'influence subite de la lumière du soleil avec une théorie nouvelle fondée sur des recherches faites par H. W. Jacobæus. 8vo. *Copenhague*, 1856

Jacobi. Expériences faites à Dorpat en 1836 ou 1837 pour connaître la limite de la vitesse avec laquelle l'électricité se développe dans les conducteurs. (*Bulletin Scientifique de l'Acad. de St. Pétersbourg*, iii. 333.) *Pétersbourg*, 1838

(*Vide* also Anon., Electro-Metallurgy, 1843.)

Remarques relatives à un Mémoire de M. Pouillet sur des appareils destinés à mesurer la vitesse des projectiles. 4to. *Paris*, 1845

Erfahrungen über die Heilkraft des Galvanismus. (*From Martens.*)

† **Jacobi,** C. G. J. Sur quelques points de la galvanométrie. 4to. 6 pp. (*Compt. Rendus Séance, Sept.* 8, 1851, p. 277, tom. xxxiii. No. 10.) *Paris*, 1851

Jacobi, H. Note sur quelques expériences avec une cible électro-magnétique. 8vo. (*Mélanges Phys. et Chim. du Bull. de l'Acad. de St. Pétersb.* tom. v. liv. 5.) *St. Pétersbourg, Riga, and Leipzig*, 1863

Jacobi, Moritz Hermann Von. *Born Sept.* 21, 1801 (*N. St.*) *at Potsdam.*

Die erste Nachricht von seinem Boot. (*In die Augsburger Allgem. Zeitung*, 30 Okt. 1839.) 1839

Einige Notizen über galvanische Leitungen. (*Bull. Phys. Math. de St. Petersburg*, i. 129.) *Petersburg*, 1842

Rapport fait à l'Acad. des Sciences de St. Pétersbourg sur la dorure galvanique.

† Mem. sur l'application de l'électro-magnétisme au mouvement des machines. 8vo. 54 pp. 1 plate. *Potsdam*, 1835
"Das erste genügende Resultat von Jacobi's Arbeiten (in Galvano-plastic) wurde am 17 Oct. 1837 der Akad d. Wissensch. in Petersburg vorgelegt." (*From Martin and Pogg.* i. 1177.)

Expériences electro-magnétiques formant suite au Mém. sur l'application de l'électro-magnétisme au mouvement des machines de 1835. (*Bull. Scient. Acad. Pétersb.* ii. 1837.) *Petersburg*, 1837

† On the application of Electro-Magnetism to the movement of machines. 29 pp. 1 plate. *London*, 1837

Uber Becquerel's einfache Sauerstoffekette. 8vo. (*Pogg. Ann.* xl. 1837.) *Leipzig*, 1837

† Die Galvanoplastik od. d. Verfahren coharentes Kupfer in Platten od nach sonst gegeb Formen unmittelbar aus Kupfer auflösungen auf galvan Wege zu produciren. Nach d. auf Befehl d. Gouvernements in Russ Sprache bekannt gemachten Originale. 8vo. *Petersburg and Berlin*, 1846

† La Galvanoplastica ossia processo per ottener immediatamente in via Galvanica, lastre o altre date forme solide di Rame dalle soluzioni di questo metallo . . Versione dal Tedesco del G. Guissani. 8vo. 69 pp. 1 plate. *Milano*, 1841

Jacobi, Moritz Hermann Von—*continued.*

Sur la pile à effet constant du Prince Bagration. (*Bull. Phys. Math. Acad. Petersb.* ii. 1844.) *Petersburg*, 1844

Account of Prince Bagration's Battery. (*L'Institut. . No.* 530 22 Fev. 1844.)

Description d'un Télégraphe électrique naval, établi sur la frégate à vapeur le "Polkan." 4to. *St. Petersburg*, 1856

About fifteen articles on Galvanism, Electro-Magnetism, and Galvanoplastics in the Bull. Scient. Acad. Petersburg, 1837—1842; and about seventeen articles on the same subjects in the Bull. Phys. Math. Acad. Petersb. 1843—1857.

† Galvano-plastic. Exposition universelle de 1867 à Paris. Rapports du Jury International, tom. viii. p. 123. 8vo. 33 pp. *Paris*, 1868

(*Vide* also Hellwag and Jacobi.)

Jacopo. (*Vide* Riccati-Jacopo.)

Jacquet de Malzet, Louis Sébastien. *Born* 1715, *at Switzerland or Nancy; died August* 17, 1800.

† Précis de l'Electricité, ou extrait expérimental et théorique des Phénomènes électriques. 8vo. 235 pp. 7 plates. *Vienna*, 1775

Lettre d'un Abbé de Vienne à un de ses amis de Presbourg, sur l'Electrophore perpétuel. (Published anonymously.) (*From Volta, "Collezione,"* tom. i. pt. i. p. 159.) (*Vide Hildebrand for the German translation.*) *Vienna*, 1775

Schreiben eines Geistlichen zu Wien an einen seiner Freunde zu Presburg von dem immerwährenden Elektrophor. aus dem Franzoen. mit Anmerkn. übersetzt. (Published anonymously.) (*Vide* Hildebrand.) *Wien*, 1776

† Jacquin. In Letter to M. Fisher on Davy's experiments with battery on the Alkalies. 8vo. 2 pp. (*Phil. Mag.* xxxvi. 73.) *London*, 1810

† Jadelot, J. F. N. Expériences sur le Galvanisme . . de Humboldt. Traduction avec des additions. 8vo. 530 pp. 8 plates. *Paris*, 1799

† Jager. Versuch einer Vergleichung des Turmalins mit den trockenen electrischen Säulen. Geschrieben im Nov u. Dec. 1816. 8vo. 48 pp. *Leipsig*, 1817

† Jahn, A. Vorläufige Beurtheilung d. Contact u. chemischen Hypothese d. Galvanismus ein Programm . . 8vo. 50 pp. *Dresden*, 1842

Jahrbücher der K. K. Central Anstalt f. Meteorologie und Erdmagnetismus. (*Vide* Kreil, Jelinek, Fritsch.)

Jalaguier. Des effets de l'Electricité sur les corps vivants. (Thèse.) *Montpellier*, 1836

Jallabert, Louis. *Born July* 26, 1712, *at Geneva; died March* 11, 1768, *at Beguin, near Geneva.*

Sur une trombe vue sur le Lac de Genève. 4to. (*Mémoires de Paris*, 1742.) *Paris*, 1741-42

La guérison d'un paralytique par le moyen de l'Electricité. 4to. (*Mémoires de Paris*, 1748.) *Paris*, 1748

† Expériences sur l'Electricité, avec quelques conjectures sur la cause de ses effets. 8vo. 304 pp. 3 plates. *Genève*, 1748

† Expériences sur l'Electricité, avec conjectures. 2e édition. Sm. 8vo. 379 pp. 3 plates. *Paris*, 1749

(*This edition contains* (*at* p. 363) "*Lettre de Sauvages*" *of June* 25, 1749.)

† Experimenta electrica usibus medicis applicata. Oder Versuche über die Electricität, aus denen der herrliche Nutzen derselben in der Arzneywissenschaft . . zu ersehen . . Denen zu Ende beygefügt . . Sauvages . . Schreibner an . . Bruhier . . Aus dem Franz. übersetzt. 8vo. 312 pp. 3 plates. *Basle*, 1750

(*Vide* also Anon. Medical Electricity, 1763.)

Jallabert u. **Ammersin.** Versuche über die Electricität, mit einem Zusatze von der eigentlichen Electricität des Holzes, von Ammersin. 8vo. *Basel*, 1771

† **James,** Sir H. Instructions for taking Meteorological Observations, with Tables for their correction, and Notes on Meteorological phenomena. Roy. 8vo. 52 and 34 pp. 22 plates. *London*, 1861

Two Maps of the World, with lines of magnetic declination; and four Charts of the Stars, on the geometrical projection of two-thirds of the sphere.

Jameson, Robert. *Born July* 11, 1774, *at Leith; died April* 17, 1854, *at Edinburgh.*

(*Vide* Edinburgh Phil. Journal, and Edinburgh New Phil. Journal.)

† **Jameson,** W. W. Storm at Rotterdam in August, 1823. (Reference to anonymous account in *Phil. Mag.* p. 232 *ante.*) 8vo. 1 p. (*Phil. Mag.* lxii. 316.) *London*, 1823

Jamin, J. C. Sur les mouvements imprimés par un aimant aux liquides traversés par les courants. 8vo. (*Ann. Chim. Phys.* xliii. 1855. *Paris*, 1855

Janin de Combe Blanche, Jean. *Born January* 11, 1730, *at Carcassonne.*

† Mémoires et Observations anatomiques, physiologiques et physiques, sur l'œil, &c. *Lyon*, 1772

Sur les causes de la mort subite et violente . . les victimes . . rappelées à la vie. 8vo. *Paris*, 1772

(*Note.—A man restored after having been hung.*)

On the use of Electricity in black Cataract (schwartzen Staare). 17 cases. *Paris*, 1773

Jaques de Vitry. (*Vide* Vitry, Jas.)

Jedlick et **Csapo.** Pile monstre; perfectionnement dans les piles de Bunsen. (*From Du Moncel, Exposé*, 2nd edition, pp. 82 and 466.) 1855

Jeffreys, J. An inquiry into the laws governing the two great powers, Attraction and Repulsion. 8vo. (*Extracted from the Journal of the Asiatic Society for September*, 1833.) *London*, 1833

† **Jelgersma,** W. B. Specimen physicum continens experimenta quædam circa phænomena, Lagensæ Leidensis; præcipue circa effectus caloris in eadem. 4to. 44 pp. *Franequeræ*, 1775

Specimen experimentorum Lagenam Leidensem spectantium. 8vo. 206 pp. *Franequeræ*, 1776

† Specimen physicum inaugurale de caloris influxu in electricitatem . . 4to. 54 pp. *Franequeræ*, 1776

Jelinek. (*Vide* Kreil.) 1841

Jelinek, C. Beitrage zur Construction selbstregistrirender meteorologischer Apparate. Roy. 8vo. 42 pp. 9 plates. (*Sitzungsbericht. Wien Acad.* v. 1850, ii. *Abtheil.*) *Wien*, 1850

(*N.B.—The instrument of Wheatstone reported* (*at* p. 24) *to be at the Kew Observatory, was never there.*—F. R.)

† Uber die jahrliche Vertheilung der Gewitter tage, nach den Beobachtungen an den meteorischen Stationen in Oesterreich und Ungarn. 8vo. 9 pp. (*Sitzb. d. k. Akad. d. Wiss.* lxi.) *Wien*, 1870

† Uber die Leistungen e an der KK. centralanstalt fur Meteorologie u. E. befindlichen registrirenden Thermometers v. Hipp. 8vo. 13 pp. *Wien*, 1870

Uber die Sturme des November und December, 1860. 8vo. 32 pp. 4 plates. *Wien*, 1867

† **Jencken,** J. F. Treatises on light, colour, electricity, and magnetism. Translated by H. D. Jencken. 8vo. 232 pp. *London*, 1869

† **Jenkin,** Fleeming. Précis of a Lecture on the construction of Telegraphic Lines, delivered by Fleeming Jenkin at the Royal Engineer Establishment, Chatham, Jan. 2nd, 1863, written from the Lecturer's notes by C. S. Beauchamp, and corrected by the Lecturer. 8vo. 18 pp. 16 figures. *London*, 1863

Jenkin (and **Masson** ?) On the influence, by induction, of an Electric current on itself. 8vo. *London*, 1834

(*From Faraday, who says he published "a brief account of these results," &c., in the Phil. Mag. for* 1834, v. 349, 444.)

Jenkins. On the Magneto-electric shock. 8vo. (*Phil. Mag.* 1834, vol. v. p. 349.) *London*, 1834

(*This is Faraday's account of Jenkins' experiments and apparatus.*)

† **Jest,** C. Notizia di un nuovo apparato per esplorare l'azione dell' elettromagnetismo sui corpi. 8vo. 2 pp. *Torino*, 1847

† **Jest,** E. F. Cenni sulla nuova macchina idro-elettrica d'Armstrong e sulla nuova pila di Bunsen. 8vo. 11 pp. 1 plate. *Torino*, 1844

† Macchina idro-elettrica di Armstrong e nuova Pila di Bunsen. Folio. 5 pp. 1 plate. (*L'Economista Ann.* iii. 1845, vol. i. p. 23.) *Milano*, 1845

Jesuits at Pekin. Magnetic Observations. *Vide* Entrecasteaux, Voyage à la recherche de "La Pérouse." (*Mém. Acad. Pétersbourg*, viii. 276.)

The Jesuits at Pekin made in the year 1755, an experiment with plates of glass, &c. (on charge, or induction, &c.), an account of which was sent to Petersburg, and published in the Memoirs of the Academy there, vol. viii. p. 276. (*Seventh vol. of the new Commentaries of the Academy of St. Petersburg.*)

(*Vide* also Grosier.)

Jobert (de **Lamballe.**) Etudes sur le système nerveaux. *Paris*, 1838

On Medical Electricity. (*Bulletin général de Thérapeutique*, tom. xxiii.)

† Des appareils électriques des poissons électriques. La. 8vo. 104 pp. 11 plates. *Paris*, 1858

Johnson, E. J. On the influence which Magnetic Needles exercise over each other. 4to. (*Phil. Trans.* 1834.) *London*, 1834

† Report of Magnetic Experiments tried on board an iron steam vessel, by order of the Right Honourable the Lord Commissioners of the Admiralty. . . Accompanied by plans of the vessel, and tables showing the horizontal deflection of the Magnetic Needle at different positions on board, together with the dip and magnetic intensity observed at those positions, and compared with observations made on shore, with the same instruments. Addressed to Charles Wood, Esq., M.P. &c., and communicated by Captain Beaufort, R.N., F.R.S., Hydrographer to the Admiralty, by command of the Right Honourable the Lords Commissioners of the Admiralty. 4to. 22 pp. 1 plate. (*Phil. Trans.* 1836.) *London*, 1836

† Practical illustrations of the necessity for ascertaining the Deviations of the Compass, with explanatory diagrams, and some account of the Compass system now adopted in the Royal Navy; Notes on Magnetism, &c., published under the sanction of the . . Lords Commissioners of the Admiralty. 4to. 85 pp. 2 plates. *London*, 1847

† Practical illustrations of the necessity for ascertaining (the) Deviation of the Compass. . . 2nd edition. Published under sanction of the . . Admiralty. 8vo. 174 pp. Chart and 2 plates. *London*, 1852

Johnston. Physical Atlas, illustrating the geographical distribution of Natural Phenomena. 2 vols. 1848

† **Joly,** A. Nouveau système de Signal fixe avec répétiteur mu par électricité à l'usage des Compagnies de Chemins de fer. 4to. 3 pp. 1 plate. *Grenoble*, 1858

† **Jones,** A. Historical sketch of the Electric Telegraph. 8vo. 192 pp. *New York*, 1852

Jones, Henry Bence. *Born December* 31, 1813, *at Thorington Hall, Suffolk; died* 1873.

Animal Electricity: being an abstract of the discoveries of Dr. Dubois Raymond. Edited by H. B. Jones. 8vo. *London*, 1853?
(*Latimer Clark's Catalogue says* 1852.)

Jones, G. (*Vide* Perry.)

† Jones, G. Observations on the Zodiacal light, from April 2, 1852, to April 22, 1855, made chiefly on board the United States steam frigate Mississippi, during her late cruise in Eastern Seas, and her voyage homeward; with conclusions from the data thus obtained. 4to. 705 pp. (*Forms the 3rd vol. of the United States Japan Expedition.*) *Washington*, 1856

Jones, Thomas. On his Reflecting Compass (in principle identical with Schmalkalder's), and his Metallic Spectacles. (*Gilb. Ann.* liv. pp. 197, 308.)

† Description of a new Reflecting Compass (*i.e.* Kater's.) 8vo. 3 pp. 1 plate. (*Phil. Mag.* xlvi. 7.) *London*, 1815

† Jones, W. Discourses on the Natural History of the Elements. 4to. 10 plates. *London*, 1781

† Essay on Electricity . . by the late G. Adams. The 5th edition, with corrections and additions by William Jones. 8vo. 594 pp. 6 plates. *London*, 1799

† Six Letters on Electricity. 8vo. 68 pp. *London*, 1800

Jones. (*Vide* Rittenhouse and Jones.)

Jordan, C. J. Engraving by Galvanism. Letter. 8vo. (*Mechanic's Magazine for June*, 1839.) *London*, 1839

(*Note.—Dicks calls this the "earlie published account of the manipulation requisite for obtaining casts by galvanic action;" totally ignoring, or perhaps being ignorant of, Brugnatelli's complete processes in the year* 1802.)

Jordan T. B. Remarks on Electro-Metallurgy. (*8th Annual Report of the Royal Cornwall Polytechnic Institution.*)

Jorg. Electricität als allein Ursache aller Naturerscheinungen. 12 pp. *Neuburg*, 1864

Jori, B. Saggio di fenomeni elettrochimici nella repristinazione dell' argento da diverse sue soluzioni saline col mezzo di ferro solo, ed accoppiato ad altri metalli. 8vo. 27 pp. *Milano*, 1844

Joule, James Prescott. (*Born December* 24, 1818, *near Manchester.*)

† Description of an Electro-Magnetic Engine. Letter to the Editor dated August 30, 1839. 8vo. 3 pp. (*Ann. of Elect.* iv. 203.) *London*, 1839

† On Electro-magnetic forces. 8vo. 8 pp. Plate. (*Ann. of Elect.* iv. 474.) *London*, 1840

† On Electro-magnetic forces. 8vo. 12 pp. 1 plate. (*Ann. of Elect.* v. 187.) *London*, 1840

† Description of a new Electro-Magnet. Letter to the Editor. 8vo. 2 pp. 1 plate. (*Ann. of Elect.* v. 431.) *London*, 1841

† On Voltaic apparatus. 8vo. 6 pp. (*Proceedings Lond. Elect. Society.*) *London*, 1842

† On the Heat evolved during the Electrolysis of Water. 8vo. 20 pp. and table. (*Literary and Phil. Society Manchester*, vol. vii. pt. ii. 2nd series.) (*Arago's copy.*) *Manchester*, 1843

† On the calorific effects of Magneto-Electricity, and on the mechanical value of Heat. (British Association, at Cork, August 21, 1843.) 8vo. 30 pp. (*Phil. Mag.* Series iii. xxiii. for 1843.) *London*, 1843

(*Vide* also Scoresby, W., and Joule, 1846.)

Joule, James Prescott—*continued.*

† Account of Experiments demonstrating a limit to the Magnetizability of Iron. 8vo. 20 pp. (*Phil. Mag. for October and December*, 1851.) *London*, 1851

† Account of Experiments with a powerful Electro-Magnet. 8vo. 5 pp. (*Phil. Mag. for January*, 1852.) *London*, 1852

† On the Fusion of Metals by Voltaic Electricity. Read March 4, 1856. 8vo. 4 pp. (*Mem. of the Literary and Phil. Society of Manchester, Session* 1856-7. Vol. xiv.) *Manchester*, 1857

Jounin. (*Vide* Gallotto and Jounin.)

† Jourdain, A. Considérations théoriques sur les condensateurs électriques. (Jourdain *Répétiteur*.) 8vo. 16 pp. *Poitiers*, 1858

Journal der Chemie von Scherer. 10 vols. 8vo. *Berlin*, 1798-1802

Neues allgemeines Journal d. Chemie von Gehlen. 6 vols. 8vo. *Fortset. desselben sind.* 1803-5

1. Journal für die Chemie u. Phys. von Gehlen. 9 vols. 8vo. 1806-10

2. Neues Jour. für Chemie u. Phys. von Schweigger. 60 vols. 8vo. *Nürnb.* 1811-30

3 Neues Jahrbuch der Chem. u. Phys. von Schweigger-Seidel. 8vo. *Halle*, 1831

Journal de Chimie. Par J. B. Van Mons. 8vo. *Bruxelles*, 1802

Journal de Mathématiques. Vols. i. to xviii. 4to. *Paris*, 1836-53

Journal für die reine und angewandte Mathematik. Herausgegeben von A. L. Crelle. Vols. xix. to lii. 4to. *Berlin*, 1839-56

† Journal of Natural Philosophy, Chemistry, and the Arts. By William Nicholson. 5 vols. 4to. *London* 1787-1802

36 vols. 8vo. *London*, 1802-13

Journal of Pure and Applied Mathematics 8vo. *London*, 1855-62

Journal of the Franklin Institute of the State of Pennsylvania Edited by T. P. Jones. 8vo. *Philadelphia*

Journal de Physique. Tableau du travail annuel de toutes les académies de l'Europe; ou Observations sur la physique, &c. . . par Rozier, J. Vol. i. 4to. *Paris*, 1772

Observations sur la physique, &c. . . . par Rozier. Vols. ii.—xii. 4to. *Paris*

Observations sur la physique, &c. . . . par Rozier et Monge. Vols. xiii.—xxvi. 4to. *Paris*

Observations sur la Physique, &c. . . . par Rozier, Monge, et De la Métherie. Vols. xxvii.—xliii. 4to. *Paris*

Journal de Physique, &c. . . . par De la Métherie. Vols. xliv.—xlvii. (or Vol. i.—iv.) 4to. *Paris*

Journal de Physique, &c. . . . par De la Métherie (excepting vols. lxxvi. and lxxvii. in which he was aided by Ducrotay de Blainville). Vols. xlviii.—lxxxiii. 4to. *Paris*

Journal de Physique, &c. . . . par De la Métherie et Ducrotay. Vol. lxxxiv. 4to. *Paris*

Journal de Physique, &c. . . . par Ducrotay de Blainville. Vols. lxxxv.—xcvi. 4to. (Being together 96 vols.) *Paris*

(*Note.—Many of these are in the Library.*)

Journal des Savans. 77 vols. 4to. *Paris*, 1665-1748

Continuation. 34 vols. 4to. *Paris*, 1749-92

Nouvelle Continuation. 28 vols. 4to. *Paris*, 1816-45

Jugel, J. G. Physica mystica et phys. sacra sacratiss. Offenbarung der magnet. Anziehungskraft. 8vo. *Berlin*, 1782

Julia-Fontenelle, J. S. E. Sur les combustions humaines spontanées. (Revue médicale.) 8vo. 1828

Julien, A. S. Sur quelques phénomènes volcaniques mentionnés par les auteurs chinois. (*Compt. Rend.* 1840.) 4to. *Paris*, 1840

Julien, J. Markvärdigt norrsken och magnetnålens rorelser d. 4 Apr. 1791, observerad in Uleäborg. (*Vetensk. Acad. Handl.* 1793.) 1793

Julio (or **Giulio**), **Gioberti**, **Vassalli-Eandi** et **Rossi**. Bibliothèque Italienne, ou Tableau des progrès des sciences et des arts en Italie. 5 vols. 4to. *Turin*, 1803-4

Jundzill. Du Télégraphe des locomotives de G. Bonelli, destiné à prévenir les collisions sur les chemins de fer. 8vo. 1856

Jungnitz, L. A. Aphorismen über d. Lehre von d. Elektricität. 8vo. *Breslau*, 1794

Aphorismen von der Lehre über die Elektricität. 8vo. *Breslau*, 1796

Über d. Erfolg. d. Blitzfeuer auf d. Schneekoppe. 8vo. *Breslau*, 1805

Darstell. d. Erfolgs d. auf d. Schneekoppe v. H. v. Lindener 1805 angestellten u. an mehreren Orten beobachteten Blitzfeuer. 8vo. *Breslau*, 1806

Junoblowiskiana Society. Proposal for a Prize, to be given in 1795, on Matters related to the Experiments of Galvani, Valli, Volta, and others. Prize announced in 1793. 8vo. (*Comment. de rebus in Scient. Nat. et in Med. gestis*, xxxvi. 54.) *Leipzig*, 1793 ?

Jurgensen. Hen bevaegelsen af electr. Stromme. 8vo. 3 pp. *Kjobenhvn.* 1856

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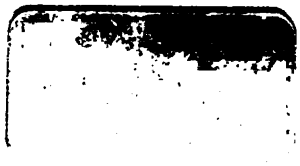
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